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ADDRESS.

*HIGHER GRADUATE INSTRUCTION AND SPECIALISM IN MEDICINE.**

BY LAURENCE TURNBULL, M.D., PH.G.

IS this instruction required? Examine the men who are yearly sent out of our medical institutions, all over the country, with their diplomas, and you will find they are sadly deficient in the practical knowledge to fit them to take the lives of the community in their hands.

Proof of this is not wanting: a few questions addressed to them will convince the most skeptical of their utter ignorance of some of the most essential facts, which are always considered requisite to make a correct diagnosis. The extreme awkwardness with which they handle delicate instruments shows at a glance that they are not familiar with them. A still more positive proof is afforded by the best men of the class being willing and anxious to undergo a competitive examination for the navy, army, or hospital appointment, so as to afford them the opportunity of practical instruction, which is of so much value in the profession. How few, alas! are these opportunities to the larger number who apply, and how dishonorable in our schools of medicine to grant diplomas to hosts of graduates who are lacking practical technical education, and still more, manual training; who must enter practice, and find little or no success, drift into something else, or become depressed in mind at their lack of the requisite knowledge, losing their patients because unable to make a correct diagnosis and follow it by successful treatment. These men, many of them poor in pocket but rich in honorable intentions, feeling their great need, as soon as they are able to save a little money, have to come again to the great centres of medical knowledge for the practical instruction which they should have acquired before receiving their certificate to practice.

What is Wanted in Our Medical Schools.—There are always young alumni of the various schools who, having little practice and plenty of time on their hands in a large city, devote themselves to special branches of medicine, and acquire a thorough knowledge of the same in order to teach, and are glad to be connected with their Alma Mater. These men should receive, as an equivalent for their work, the title of Clinical Professors, and, in conjunction with some hospital or dispensary service, should teach a number of months in the year to limited classes designated by the Faculty.

NUMBER OF LECTURES.

There should be from three to six lectures, clinics or private classes at the same time, and most of our large buildings could be so altered as to provide accommodations for the students. Prior to their coming, it would be of much service to them if they could acquire some knowledge of the living languages, such as French and German, and botany, natural philosophy and zoology.

What the Junior Students Should Do before They Come.—First: Much time should be given to Anatomy, the study of bones, dissecting dead animals and living plants. Second:

* Delivered at the opening of the new Howard Hospital Building, Broad and Catherine Sreets, Philadelphia, May 23, 1889.

Demonstrations upon model or manikin, or the dead subject, so as to be able to point out and determine, first, the color, form and size of every organ of the body and its position in relation to other organs. Third: To attend a certain number of lectures on chemistry, then to perform all the ordinary simple experiments in chemistry in the laboratory; testing the purity of drugs, animal fluids, their toxological relations, etc. Fourth: Lectures on Materia Medica, and by handling, smelling, and tasting every article employed in medicine; not only when properly labelled and named, but to determine the name by the form, taste and smell, when only numbered. All of the manipulations in pharmacy and pharmaceutical chemistry in the laboratory. In the summer months the teacher or clinical professor of Materia Medica should form a class for the study of practical medical botany, and describe each specimen and dissect it under the microscope. The assistant professor of chemistry should teach medical physics, including heat, light, sound, electricity, thermometry, etc.

What the Senior or Graduating Class Should Do.—Pathology. First, of animals, by handling every organ and dissecting it, and then of men, and the various natural and then abnormal products and rare forms, by means of models.

Practical Medicine should be taught by lectures on diagnosis and memorizing the chief points of the most ordinary diseases, symptoms, palpation, percussion and auscultation.

Surgery. First: Minor Surgery. Applying bandages, bleeding, cupping, applying leeches, opening abscesses, vaccination, removing foreign bodies, making of poultices, applyiny hot and cold lotions, etc. Major Surgery. Operations under a clinical assistant by performing everything of importance.

Obstetrics. The care of the woman prior and subsequent to confinement. Mode of arranging the bed in confinement, position, etc. Touch and mode of determining the position of the fœtus. Thorough knowledge of the various positions of the fœtus in utero. Various steps of delivery. Applications and use of catheter and forceps on the manikin, etc., and attendance upon one to three cases of normal and abnormal labor, with use of forceps and catheter, under care of assistant.

Care of the woman after confinement, diseases of the nipple and mammary glands. Also care and treatment of phlebitis and puerperal fever.

Gynæcology. Study of symptoms, treatment of amenorrhœa and dysmenorrhœa, leucorrhœa and anæmia. Diagnosis of ulceration of uterus, ovarian, fibroid, polypus, and malignant disease, with operations for the same.

Therapeutics. This is one of the most important subjects in the whole curriculum of study, demanding the most thorough and careful consideration on the part of both teacher and student.

The class should be so arranged that each individual will be able to study the action of all drugs and medicines on animals and man; first, on the animal, and then on the man; and every medical school should provide animals for that purpose. Especially should be tested all powerful alkaloids, as atropia, morphia, pilocarpine, aconite, cocaine, etc., and students should see the antidotes applied. Testing of all the secretions and excretions in various diseases, urine, blood, bile, fæces, etc., so as to tell at a glance if the secretions be normal or abnormal.

The graduating class or post-graduate wants to receive the opinions and newest practical ideas of the specialist in mental and nervous diseases; of laryngologists, on throat diseases; ophthalmologists, on eye system; and otologists, on diseases of the ear.

He requires instruction in their various methods of the application and manipulation with instruments, use of light, etc., so as to examine every part of the human body, and by a system of exclusion find out the most obscure disease. These should be supplied with but little extra expense to a graduate in medicine of a three years' graded course.

Another important matter is, careful and systematic training in the administration of anæsthetics.

This should be given to every medical student, as so much depends upon the administrator,—in some cases almost more than upon the operator. At how many medical schools are any but the barest attempts made to give instruction in a systematic manner, on a subject which I venture to think is not the least important in the curriculum?

We now come to the last part of our subject, Specialism in Medicine.

Specialism is one of the legitimate developments of medicine, and the great strength which to day is manifested in special organizations

shows how well the founders of this hospital were truly alive to the most progressive ideas. Look at the growth of medical knowledge during the thirty-six years of its existence in this institution. It has become so great that our mind cannot master, much less employ, the knowledge in the practice. As a recent writer* so well expresses it:—

"There are no Admirable Crichtons in our art. The genius of a Sydenham would shrink in despair before the immense masses of medical lore accumulated since his day. We read with astonishment of the acquirements of Dr. John Mason Good, who, to the reputation of a polyglot, added that of one of the foremost practitioners of his age. It is universally acknowledged that the men of one idea, those who confine their attention to one th ng, be it a business or a science, are the men who succeed, who represent the progress of the age, and whose names posterity will not willingly let die. If we could imagine a physician thrown into a Rip Van Winkle sleep of say but ten years, and then recommence the practice of medicine, he would be astonished at the progress in all branches of the art. He would feel like the mouse which thought his chest was all the world, but was astonished when he stood upon the hill and looked out to see what a great world lay beyond him. An oculist once observed with apparent satisfaction that many people no longer consult the family doctor about their eyes, but went at once to the oculist, as they would to a dentist for their teeth. Some regard this custom as objectionable, but it is entirely correct. The oculist will know the most about the eyes, and the doctrine that the patient should first go to a general practitioner, to be by him referred to the specialist, sounds very pretty, but it is unreasonable. Specialists of any standing in large cities are generally about equal in abilities, and the patient is just as likely to make a correct choice as the family physician.

"Every year, as the physician becomes better educated, is his field of labor enlarged. Some years since, the application of the obstetrical forceps was regarded as an operation requiring a consultation; now every recent graduate considers himself capable of performing it. All doctors should be able to prescribe the proper glasses for simple hypermetropia, and apply the uterine dilator in cases where it is indicated. These methods of treatment are supposed to belong especially to the oculist and gynæcologist.

"What is this extension, however, but an admission of the advantages of specialism? Why is the use of these instruments advised? Because these applications in the hands of specialists have shown such beneficial results that the general profession dares not overlook them if it would be true to its great trusts. Imitation is the sincerest flattery, and, so far as the general practitioner follows the specialist, he unconsciously approves him."

In a recent discussion on this subject, Dr. Edward Jackson expressed some logical views, as follows:—

"It has been said that the large number of specialists might be ascribed to the ignorance of the general practitioner. I would state this differently, and call attention to a view of specialism which I think is not sufficiently considered. A young man who has spent a few months in some eye hospital, concludes to take up the specialty of diseases of the eye, and goes into some large town in the interior of the country, where specialism is unheard of. He is consulted by patients who have become blind from glaucoma: losing the precious time when relief was possible, by the advice of the best practitioners of the place, they must await the ripening of cataracts that never existed. He will find other cases—for instance, of refractive errors—which have been improperly treated or not treated at all. Cases of this kind will give him reputation with the laity, but will probably make enemies in the profession and raise some outcry against specialism. Now, in such a town, the fact is not that the general practitioners are ignorant, but that there are no general practitioners. Those calling themselves general practitioners have been practicing specialism in its commonest form—that is, the form in which the practitioner devotes his attention especially to acute inflammatory diseases, fevers, obstetrics, and one or two other subjects, and ignores very many important branches of medicine. This is the form of specialism that has taken the firmest root and spread most widely; and specialism, so-called, is merely the necessary growth of this, and is, to a certain extent, a recuperative reaction. This primary, widespread, and worst form of specialism arises from defective medical education. The crowded college curriculum doe

* Leffman.

not adequately provide for certain departments of medicine which are of as real importance as any to the truly general practitioner."

And it is fair to ask—can a man be an educated physician and yet be ignorant of the use of the ophthalmoscope? Take, for instance, optic neuritis, and cerebellar disease, retinal hæmorrhage and renal mischief, retinal congestion and neuritis in pregnancy, characteristic retina of leukæmia. An examination of the retina might save a life. How many an unfortunate might escape a world of drugging, if the practitioner could recognize the effects of astigmatism in the headache, the dizziness, the inability to work—symptoms so often referred to the stomach—all corrected by suitable glasses!

In the case of otology, let me enumerate some of the blunders I have known to be committed. Polypus has been mistaken for abscess, and *vice versâ*; the membrane destroyed in attempts to remove a foreign body which was not present; cerumen syringed for heroically, when not a particle of cerumen was there; the membrana tympani supposed to be absent and an artificial membrane advised to be worn, when the membrane was intact; ears lost, in and after scarlatina, from want of treatment by paracentesis; mastoid abscess and periostitis, the result of neglected discharge, which was permitted to exist under the practitioner's advice that to "meddle with a discharge from the ear was dangerous." To those alone who do a large aural practice are the errors known which are fallen into in the simplest cases from a want of as much otological knowledge as one might gain in the extern department of our hospital in a single day. The study of the ear and throat is naturally allied. The naso-pharyngeal tract, so frequently affected simultaneously with the ear, requires special attention at the hands of all those who are anxious to know anything of the diseases of the latter. There is no simpler instrument to learn the application of, or at least to make one's self proficient in the diagnostic value of, than the laryngoscope.

To treat blindly every case of aphonia, ignorant of its cause and the pathological states which give rise to it, when we can readily satisfy ourselves of the condition of the larynx with the laryngoscope, partakes strongly of quackery. The distress caused to the patient in using the instrument, and the discomfiture of the surgeon in the attempt, is simply the result of the waste of some little instruction, which would prevent the bungling and awkwardness of an uneducated hand.

In order to properly follow and develop any one of the specialties in medicine, the medical man must have a thorough training and experience as a general practitioner, and then gradually devote his mind and body to the special study of one department, which he intends to make his life-work.

Now a word or two in regard to our institution. Of the medical men who first acquired fame in this institution and have now passed away, we cannot help noting the names of James Aitken Meigs, distinguished as an ethnologist and physiologist, and of Samuel W. Gross, who performed his first important operation in this hospital. Of old residents and physicians who were connected with us and are now practicing their profession with credit to themselves, the public, and our institution, we would mention a few of them, as Drs. C. P. Turner, O. H. Allis, Wm. H. Parish, C. S. Turnbull, and many others. Some misapprehension has occurred in reference to our incurable department that we have placed so prominently on the front of our building.

The Howard was the very first to bring this important subject to the attention of the profession and the public; fortunately at that early period it languished for the want of adequate funds. It prevented us from erecting a large building and bringing together a mass of suffering humanity, who when they entered were never to return into the world well beings, each tending to make the other unhappy and all hopeless. It is well known from experience and experiments that no two consumptive patients, or cases of cancer, can be in the same ward without much discomfort to each and others by their cough and the disagreeable odors common to the incurable department. Hospitals for consumptives and cancer, both in this country and in Europe, have not proved a success. The home, be it ever so humble, of each sick and incurable individual, is the best and most happy place, when supplied with the proper medical attendance, food, and now and then a little money to tide over difficulties. It is in this manner, we propose to carry out the incurable infirmary department. When we are able by the generous gift of some friend, we mean to purchase a number of single small

houses, to accommodate those who are so unfortunate as to have no home. Some of those who hear me, who have the means, may be twice blessed by giving of their abundance to this department.

ORIGINAL COMMUNICATIONS.

REPORT OF TWO CASES OF ALEXANDER'S OPERATION; ONE FOR ANTEVERSION.

By CHARLES H. BAKER, M.Ph., M.D.

ALTHOUGH the operation of shortening the round ligaments was first proposed for the relief of intractable cases of retroversion and procidentia, its use for the relief of the most intractable of all displacements—extreme anteversion—has been reported.

It is my purpose to put on record another case of the same kind, to swell the list which shall serve, in the future, to publish this operation among the recognized surgical procedures for the cure of uterine dislocations.

A word first as to the mechanical questions involved.

Since shortening the round ligaments converts a retroversion into an anteversion, how can this operation be of any benefit in the latter condition? The round ligaments are inserted in the uterus below and in front of the Fallopian tubes, and pass in the folds of the broad ligament forward and outward in a curve, with the convexity downward, to the internal inguinal rings. Passing through these, they traverse the canal toward the median line again and are inserted in the tissues over the pubes.

In the normal state, the point where the ligament passes through the inner ring is on a plane about two and one-half inches higher than the insertion in the uterus, and when the uterus is anteverted so that the fundus lies behind the pubes the difference is not less than three and a half or four inches.

When the outer ends of the cords are drawn upon they slide through the inner ring as through a pulley, and the fundus uteri is elevated to the normal plane, or above. By this means the fundus is lifted off the neck of the bladder and the tenesmus caused by its pressure is relieved; at the same time the organ is pulled away bodily from the rectum, relieving the painful conditions induced by the cervix pressing down upon that viscus.

The case I relate presented the following history: Mrs. C., aged thirty-three years, a primipara, weighing never more than one hundred pounds, had suffered for over two years with menorrhagia due to granulation of endometrium, or, more strictly, accompanied by it.

When she came under my care the uterus was anteverted and the fundus lay behind the pubes, causing tenesmus by pressure on the bladder-neck, while the cervix pressed down sharply upon the rectum. The bowels were constipated, and she complained so much of pain in the rectum that a specular examination was made, only to find the bowel healthy. The coccyx was not diseased, although the patient could not sit in comfort, and pain was often referred to that region.

Menstruation regular but painful, and there were repeated uterine hæmorrhages, induced particularly by intercourse. Pain in the vertex almost constant, greatly aggravated by intercourse, which caused extreme prostration. Ovaries normal. The inner os was much constricted, and I forcibly dilated the canal and curetted thoroughly, resulting in curing the metrorrhagia, but producing no effect upon the pelvic pains.

Pessaries could not be endured for a moment, and packing with cotton or lambs' wool only temporarily relieved the symptoms, though persisted in for months. She was unable to walk more than two or three blocks, and grew steadily worse in spite of treatment.

Sedative applications to the interior of the uterus and the hot douche, together with the other recognized plans of treatment, failed to give her any relief, and it was decided to do Alexander's operation as a last resort.

February 27, 1888, assisted by Drs. Elliott and Minar, I operated under thorough antisepsis. The external inguinal rings were easily found through incisions two and a half inches in length. Not so the cords, which all the rules of other operators locate in the knuckle of fat in the centre of the ring. There were no such lumps of fat rising between the pillars of the ring—only the intercolumnar fascia. After a protracted search the cord was found on the left side—the first one operated on—under and to the outer side of the pillar of the ring. The cord, about two lines in diameter, was drawn out and stripped for about two and

a half inches, and a carbolized catgut suture passed through it twice at right angles to avoid cutting out or strangling the cord. The sutures were then passed deep through the tissues over the pubes and tied.

The resulting loop of cord was tucked into the canal without cutting off, so that, should the cord fail to unite and slip back into the canal, the woman would not be left worse off than before—with no cord at all. The wound was closed with catgut, passing the sutures deep enough to include the pillars of the ring, so as to leave no place for hernia to develop. The cord on the right side was found much easier, using the experience gained on the left, but, like the other, it lay on the outer side of the ring under the external pillar.

The wound was closed like the other, and they were dusted with dry iodoform and covered with gauze and absorbent cotton.

Union occurred without suppuration, except a few drops at the lower angle of the right side, and I attribute this to the carbolic acid in the suture at this point.

The patient was kept on the bed for four weeks and then allowed to get up, but spent the greater part of the next month reclining.

At the present time (April, 1889) the pains in the rectum and pelvis, tenesmus of bladder, and persistent weight and pain in the head are all relieved, and have been ever since the operation. The bowels, which were obstinately constipated, now move pleasantly and normally under occasional doses of cascara sagrada.

The uterus remains sharply anteverted and drawn up to the normal level, and since last June she has done the entire housework, and can walk two miles at one time. She states she has never been in better health in her life. She has not had a pessary used since her operation.

Case II.—Multipara, aged 37. Patient suffered with retroversion and prolapse of ovaries, causing severe pelvic pains and vertex pains in head. Operation December 18, 1888. Ligaments found in the knuckle of fat occupying centres of the rings were about the size of wheat-straws; drawn out three inches and left to dry up, as the mangling due to the necessary handling would probably cause them to slough if left in the wounds. The wounds were closed with silkworm-gut, passing the sutures so as to include the pillars and the cord. Suppuration occurred, although strict antiseptic precautions were used, and it required over a month for the wounds to perfectly heal. At the present time the uterus is in normal position and ovaries not prolapsed. Patient has worn a pessary part of the time, and now has a stem-cup and abdominal bandage supporter. She is greatly relieved of all her bad symptoms and steadily improving, and certainly looks as if she had been "born again"

From my experience in these two operations, I would be ready to do the same operation in suitable cases again; but, after these and one more I have witnessed, I do not hesitate to say a laparotomy is much easier to perform.

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A CASE OF PUERPERAL ECLAMPSIA.

By DR. M. M. MITIVIER,
HOLYOKE, MASS.

ON the third day of March last, about one o'clock, P.M., I was summoned to a woman who was expected to be soon confined. I found her in bed, tossing and rolling from one side to the other. She was agitated, nervous, and, although not delirious, her mind was almost wandering. She could not localize her pains, nor give any intelligent answers to questions addressed to her.

The neck of the womb was yet an inch long and indicated that she was about in her eighth month of pregnancy. There was no labor. I suspected that she had had a fit of convulsion, but the attendants were unable to give any information, as the patient had been alone during the forenoon. On further inquiries, I ascertained that she had passed but very little urine during that day, and what she had passed was dark and smoky. There was no doubt that she was laboring under albuminuria. I ordered warm poultices to the back and abdomen, liq. am. acetatis, and two pilulæ catharticæ every four hours, bottles of hot water to her feet, etc. About 2 P.M., or an hour after my first visit, I was summoned again. Patient was having a violent convulsion, which lasted over a minute. The uterus was in the same condition that it was at first. The os was still unyielding. As soon as she had recovered from the fit I bled her from the arm, and gave her thirty grains of chloral per rectum, and chloroform inhalations. She was quiet and free from pain over an hour, but after that long rest she had another fit, which was very severe. I then ruptured the amnios and gave another

injection of chloral per rectum. These measures, with the chloroform, gave her another hour of rest. After this period the convulsions recurred every ten and fifteen minutes, with a tendency of increasing in severity and frequency. The os uteri was still rigid.

Forced dilatation was now resorted to. After two hours of laborious struggle the forceps were applied, and delivery was slowly and tediously terminated. The child was dead. The placenta gave no trouble, but soon after its extraction she had another convulsion, from which she did not rally until morning. She was then very weak, and it was thought that her laborious breathing was the precursor of a speedy death. I laid this to the effect of an injection of pilocarpine, which had been given her a short time before her delivery, but ammonia, brandy, beef tea, and milk, helped her through her terrible ordeal, and by the next morning, although she was still unconscious, yet much better. The cathartic pills had operated well during the night, but there was no urine yet.

Digitalis and acetate of potash, with poultices, were now ordered. During the day a catheter was passed into the bladder, and drew about a tablespoonful of urine, which coagulated almost solid when boiled.

There was but very slight changes in her condition until the third night after her delivery. She had had now and again glimpses of consciousness, but the most of the time she remained in a drowsy and comatose condition. On the third night she passed over a quart of urine, she recognized her friends, and talked considerably, to the amazement of her attendants. From that day she made a rapid recovery, and was soon out of bed.

I chanced to meet her three weeks after, and found her covered with vitiligo. Is it the result of her illness, or merely a coincidence?

Now, I did not make this sketch because there was any new features or special points of interest in the case, but simply to show that the policy of early interference and speedy delivery is the best in the interest of both mother and child.

The fact that eclampsia is not near so fatal now as it was when it was considered wrong to interfere proves that we are right in advocating forced delivery.

It may be that when we are better acquainted with the pathology of eclampsia we may be able to arrest the terrible malady and allow Nature to terminate her work. As it is, we know but very little of it. We may call it a nervous disturbance, caused by the irritation of the nervous centres, but such a definition is as vague as space itself, and does not signify any more comprehensive meaning than so many Egyptian hieroglyphics, because we know nothing of the *modus operandi* of what we call irritation, and we are equally ignorant of what takes place in the nerves when subjected to the stimulus of an irritant, the whole of it is a complete mystery to us.

The most comprehensive part of the subject is, that convulsions, infantile or puerperal, are due to certain susceptibility or predisposition of the nervous system, which renders some liable to suffer from them under what appears to us very slight causes, while others never have them under any circumstances, and that the most potent cause of puerperal eclampsia is the presence of the child *in utero*, and undoubtedly the transformation of the womb, operated by pregnancy. Outside of these facts, our knowledge of the disease is very limited. It may be that albuminuria predisposes and increases the susceptibility of the nervous system, but I believe that its baneful influence has been much overrated. It has been my experience, that after the child is delivered the convulsions soon cease. Now, with these data in view, I consider that our duty is plain.

If we cannot arrest the convulsions with diaphoretics, venesection, cathartics, chloral, and chloroform, etc., forced delivery should be resorted to. The sooner the womb is relieved of its contents, the better are the chances of saving the life of both mother and child.

OBESITY AMONG LOCOMOTIVE ENGINEERS.

By G. W. Furey, M.D.

ONE feature of the railroad man's life has impressed itself upon my attention as a matter of direct observation. Nowhere have I been able to read or hear of any allusion to it. I refer to the constancy with which we find obesity among engineers who have been on duty as such for any considerable time. That this is a fact characteristic of locomotive engineers, as compared with all other grades of railroad men, led me to wonder why such is the case. Obtaining no data, nor finding any literature upon the subject from the sources at-

tempted, I at last concluded to resort to our worthy friend, General Principles, and, *en persona*, run out lines of discovery as well as the troubled wits of a country physician would permit.

My first step, to insure my premises, was to interview members of the calling in question. Subjoined will appear the story of each as they were spoken to. No selection was made, and no names discarded to suit the proposition :—

Name.	Age When Became Engineer.	Present Age.	Weight When Became Engineer.	Present Weight.
C. C. Ray,	24	31	180	220
Thomas Attig,	24	40	170	210
Samuel Cherry,	20	53	140	240
Robert Bergoon,	26	44	155	240
Harry Laylen,	23	43	155	196
Joseph Keefer,	24	43	160	210
James Keenen,	29	47	170	240
I. C. Nyhart,	27	32	150	150
J. L. Cherry,	26	32	136	145
N. F. Haviland,	28	33	155	165
O. H. Yeager,	25	37	155	185
John Krohn,	30	35	180	185
Wayne Simcox,	31	36	180	220
M. G. Smith,	32	40	190	220
M. L. Deihl,	27	30	160	168
S. A. Kaufman,	25	42	165	175
T. Conser,	29	36	137	180
M. Maihl,	34	42	180	180
T. Hewitt,	23	27	125	156

This table gives us an average time engaged as an engineer by each man of about eleven and one-half years, during which each has gained in weight an average of thirty-one pounds. Comparing this with the conditions obtaining with the same men only a few years previously, when they were firemen, and also with others who, as firemen at the present, have those previously filled places in charge, working day by day and trip by trip in the same cabs, eating and sleeping and living in the same manner, we observe a marked difference. On the part of the fireman, if there is any change in weight, we find him decreasing in weight. In fact, upon a fair comparison with all other vocations among men, we conclude that there is no other class, wherein the members are equally temperate, industrious, and healthy, who so uniformly take on obesity. Now I would ask why is this true? I hesitate to call attention to the fact alone, and consequently will not undertake to propound a *rationale;* but there must exist a physiological or perhaps pathological cause, and I suspect that, whatever it be, it is more or less associated with and controlled by a peculiar condition, of a mechanical nature, which has occurred to me. I refer to the engineer being subjected to the motion of his engine while he is in a sitting position.

I am constrained, however, to wonder if this fact of his receiving the continuous jar and motion of the engine directly upon the lower part of the trunk, unrelieved by nature's springs, the legs, may not affect the spinal nerves, as well as all the nerve-centres, in some occult manner resulting in arrested tissue-respiration. Would the conclusion of this event be interference with the usual combustion of the carbohydrates, and, while digestion and emulsification were not correspondingly impeded, could the fats, by some characteristic centrifugal impulse conformable with the vibro-rotatory motion of the engine, arrive at their destination and be retained? Have the essences of nutrition been polarized by molecular agitation, due to the peculiar manner in which the motion is applied, and thus arrested?

Sunbury, Pa., April 25, 1889.

*THE POLLUTION OF DRINKING-WATER.**

By W. D. BIDWELL, M.D.,
LEAVENWORTH.

WE as physicians are occasionally informed by business men and members of the other learned professions that it is lamentable we should be so much behind the rest of the world, and they endeavor to make it appear that Æsculapius, Hippocrates, Galen and Celsus were a trifle more advanced than we of the nineteenth century. I have noticed this more particularly in the case of dyspeptics, who have been unable to find a doctor clever enough to write a prescription that would cure them of their dyspepsia, while at the same time allowing them to drink whisky on an empty stomach, bolt their meals, and eat rich lunches at 11 P.M., just before retiring. But when, recently, I saw nine columns in a leading medical journal devoted to an argument on the "Biological Cell," I came to the conclusion that we have advanced too fast for my dyspeptic friend and his hundred thousand brethren in this country. I do not mean that we have too much knowledge; perish the thought!! But that the laity, the people as distinguished from the sanitarians

* Read before the Third Annual State Sanitary Convention, at Emporia, Kansas, Dec. 5, 1888.

and scientists, generally are too far behind the present state of hygienic knowledge for their own good, and too far behind to appreciate the advanced work which is now going on. At this convention are to be read papers of scientific interest; papers which will be a guide to advanced sanitary engineers. But the greatest benefit that can accrue from such a gathering is to have a large number of the citizens of Kansas learn and adopt some of the methods described to lessen sickness and suffering, and increase the sum total of human happiness and comfort. It is of no avail that we discover means of perpetuating a "mens sana in corpore sano," unless we induce our neighbors to use these means. Then, again, sanitation implies philanthropy, and this trait is usually so concealed in business transactions, or apparently assumed from some selfish motive, that a double duty devolves upon the sanitarian; first, to show the advantages of his measures and methods, and, secondly, to persuade the dear people that he is not engineering some scheme solely for his personal advancement. Now, in the matter of water supplies for a family or a community, he who can show an economical method of providing a fairly abundant supply of passably clear water has the public ear, and any attempt to secure the purchase of a filter, or to have the water brought from a purer source, at even the slightest increased expense, is attributed to a desire to get a finger into the public purse. But the past few years have witnessed several instances of sickness, death, and great financial loss, due wholly to an impure water supply, and, as a result, the public are more heedful of this subject than of many other sanitary matters, and it is quite possible that by the discussion for which this paper merely serves as a text, and by those papers on certain local water supplies to be read here, some amelioration may be brought about in the quality of the water furnished to our communities. In speaking of the pollution of drinking-water we will consider river supply, wells, natural basins or reservoirs receiving the rainfall of a district, cisterns and springs. Where subsoil water is collected by drainage pipes it is subject to the same sources of contamination as a well, and for all practical purposes may be considered as well-water. Many sources of pollution exist, of which all are cognizable, such as unclean receptacles and the exposure in open vessels to noxious gases, dust, and the more palpable impurities occasionally found in one's glass at a hotel; but before the sparkling beverage has been dipped from the mossy spring, or pumped from the swiftly flowing stream, or presented to the lips of the thirsty wayfarer by the old oaken bucket in the shade of some majestic elm hard by the old, red New England farm house, before the Mexican ganymede supplies you with a modicum from his earthen jar in return for your centavo it has run the gauntlet of a large number of impurities, and more fortunate is he who can always command a glass of pure water than the owner of a brewery. Now, by that association of ideas which is the basis of Professor Loisette's methods, the word "brewery" reminds me that the citizen of Leavenworth who wishes to visit a brewery must first cross the Missouri River, but before landing on the eastern bank we will take a look at the rivers in this part of the country. An Eastern man coming West for the first time meets with a great disappointment when the Father of Waters first meets his gaze. He is aware of the extensive region drained by the Mississippi, and, expecting something grand, can scarcely conceal his surprise, even on that huge structure the St. Louis Bridge, but exclaims in disgust, "Is that dirty stream the Mississippi River?" I shall never forget my first experience with St. Louis water. I reached the city one hot summer evening, and, being worn out with the heat and dust of travel, took a room at the Southern Hotel with bath-room attached. I filled the tub at once, and let it run out, thinking that I was flushing an unused supply-pipe; then I filled the tub again and repeated the process. I might have been running the Missouri River through that tub to-day if a friend had not called and explained that the water was all right (?), and told me that I should never see anything like the Connecticut or Housatonic rivers till I had spent my year West and returned to the Eastern States.

Such water is not only offensive to the sight and of doubtful value in washing, but it is a positive injury to the internal economy, and I have personally been obliged to use water from the Missouri supposed to have been purified by settling reservoirs, but which was only one or two shades lighter than the floor-paint mixture of that noble stream. This is not as it should be. That water was impure and its use decidedly injurious to the system. Low grades of

Indians may live on clay, but man's digestive and eliminative organs were never designed to deal with such a mixture of mud and water as the Missouri or Mississippi rivers furnish. These gross impurities can be removed by allowing the water to stand several days and drawing off the upper portion, or by the use of some modern filter, such as is now in use in Atlanta, Georgia, and in some cities in our own State. But this soil is far from being the most dangerous constituent of river-water. Decaying animal and vegetable matter is washed into the stream by every rain and by the melting of snow and ice, as well as thrown into it by butchers, hucksters, and other tradesmen. Factories discharge their refuse into it, often containing such poisons as arsenic, lead, zinc, copper, the mineral acids; and more important than all is the custom of having all sewers and garbage dumps discharge into the nearest river, regardless of the fact that a neighboring city a few miles down the river is dependent upon it for its water supply.

This pollution is bad enough at the place where the sewers empty, but the water may still pass as fairly pure if it will support an abundance and variety of fish life, which is often the case. Going down the stream a few miles, however, we find that fish die when confined to this locality; the sewage has become putrid by decomposition, is fatal to fish life, and the water is thus proven to be unfit for human drink. In this connection, I ask indulgence for quoting from the report of the State Board of Health of Connecticut, where it is stated that "a very grave error of fact in regard to the spontaneous purification of running water has gained a wide belief, and been more or less prevalent for the past twenty years. It originated from a statement by Dr. H. Letheley, the medical officer of health for the city of London, some twenty years ago. When criticising a paper of Dr. Frankland, Professor of Chemistry at the Royal Institution, he made this remarkable statement, 'I cannot agree with Dr. Frankland that the water of the Thames, after receiving defecated sewage, is unfit for domestic use; for, after a large practical acquaintance with the subject, as it is observed in the principal streams and rivers of England, I have arrived at a very decided conclusion that when it is mixed with twenty times its volume of running water, and has flowed a distance of ten or twelve miles, it is absolutely destroyed.'"

This very positive opinion by one in so high position has been received with unquestioning credulity, and is oftener quoted than any other single opinion to sustain the practice, so very prevalent, of discharging sewage into rivers. He claimed that the organic matter is almost completely oxidized by the oxygen in the air, and by that dissolved in the water, and that whatever failed of destruction in that way was consumed by infusorial animals and fish, or absorbed by aquatic vegetation.

This subject was afterward made a matter of special investigation by the Rivers' Pollution Commission, appointed by Her Majesty the Queen of England, in 1868. This commission continued their labors for several years, and made several reports of the results of their investigations. In the sixth report, presented in 1874, a detailed statement of the experiments to determine the degree of oxidation of organic matters in running water is given. And as a result of these experiments, the commissioners affirm: "It is thus evident that so far from sewage mixed with twenty times its volume of water being oxidized during a flow of ten or twelve miles, scarcely two-thirds of it would be so destroyed in a flow of one hundred and sixty-eight miles, at the rate of one mile an hour, or after the lapse of a week. In fact, whether we examine the organic pollution of a river at different points of its flow, or the rate of disappearance of the organic matter of sewage or urine, when these polluting liquids are mixed with fresh water and violently agitated in contact with air, or, finally, the rate at which dissolved oxygen disappears in water polluted with 5 per cent. of sewage, we are led in each case to the inevitable conclusion that the oxidation of the organic matter in sewage proceeds with extreme slowness, even when the sewage is mixed with a large volume of unpolluted water, and that it is impossible to say how far such water must flow before the sewage matter becomes thoroughly oxidized."

The presence of sand held in suspension in river-water is undoubtedly a factor of no little importance in removing undissolved sewage by sedimentation, but, allowing this all the power we may, a considerable amount is left in suspension after the short period usually allotted to a settling reservoir, and the matter in solution still remains. While it is a well-accepted fact that an infinitesimally small quantity of decaying matter is able to produce an injurious

effect upon health, yet I am inclined to believe that, dangerous as is this water after the old methods of purification, so called, it may be rendered harmless by the Hyatt method of treating with alum and filtering. Purification, however, is a subject by itself, and we will not enter upon it here. Where water is stored in lead- or zinc- lined receptacles, or distributed in lead or galvanized pipes there is, of course, the liability to mineral poisoning, and cases of this nature still occur, although the danger has long been known and the attention of the public been frequently called to it. The danger varies with the composition of the water; the purest and most highly oxygenated affecting it most, as do also those containing organic matter, nitrites, nitrates, etc., while waters containing carbonic acid in excess are much less dangerous, forming compounds soluble only with difficulty in the stomach. Owing to the risks attendant upon the use of lead pipes, all water supplies should be distributed through cast- or wrought- iron pipes, and as little lead as possible be used in joints and delivery pipes.

Where water is stored, it is always liable to pollution from surface washing, soakage, foul air, and frequently from the passage of foul material directly into it. Shallow well-water is always to be viewed with suspicion, it is the natural point to which the drainage of a good deal of surrounding land tends, and heavy rains will wash many substances into it. The soakage water from the ground in loose soils of chalk and sand is very impure. Thus, in a town, the well-water often shows evidence of nitrites, nitrates, ammonia, and chlorine far in excess of river-water in the neighborhood, though the strata are the same. Occasionally, by constant passage of the water, a channel is formed which may suddenly discharge into the well, and probably some of the cases of sudden poisoning from well-water have thus arisen. A well drains an extent of ground about it nearly in the shape of an inverted cone. The area must depend on the soil; but experiments show that the radius of the area drained is equal to four times the depth, at least, and that it often exceeds this, but the deepest non-artesian well will not drain a cone which is more than half a mile in radius. All shallow wells should be protected by good masonry for several feet below the surface to prevent superficial soakage and the drainage from the surrounding elevations.

In summing up, we see that cisterns are subject to pollution from the roofs, on which the water is collected, from the introduction of impurities into pipes leading from the roofs to the cistern, or into the cistern itself, and also from the materials of which it is built and with which it is lined; wells and springs from the strata through which the water passes to them, from soakage from adjacent cess-pools, privies, barn-yards, and the like, and also from surface drainage. Natural basins are affected principally by the surface drained, while rivers are subject to all these dangers, but more particularly are poisoned by receiving the drainage of towns and cities along their course. Hence, in selecting a source of water supply these elements of danger should always be considered first, and the questions of convenience and abundance can be taken into account later on.

ABSTRACTS.

REMOVAL OF A SOUND FROM THE PELVIC CAVITY AFTER SIX YEARS.

PROFESSOR WANDL related a unique case, at the meeting, February 19, 1889, of the Obstetrico-Gynecological Society of Vienna. About six and a half years ago, Mad. A., aged twenty years, was taken in her first labor. The first stage was very long and painful. After two days' fruitless efforts, by which she was much exhausted, several physicians were summoned. Upon examination, one of them declared he could find no os uteri, that it must be closed, and in order to confirm his statement probed for a long time with his sound, but did not succeed in finding the opening. The manipulation gave pain, and a slight hæmorrhage followed. The next day a living child was born.

During the first week she suffered some pain. Motion of the lower limbs gave rise to lancinating pain in the pelvis, especially upon the right side. During the next four years she endured much agony, and consulted numerous physicians without avail. For about two years she was severely afflicted with vesical tenesmus and painful micturition. The pelvic pain increasing, she went in 1887 to Vienna, and was treated in vain for cysto-pyelitis. In September of that year a Vienna specialist diagnosticated the presence of a foreign body, probably

a pin or a piece of a surgical needle; but, although the vault of the vagina was incised, a careful search of half an hour or more revealed nothing. She went home after recovery from the operation, and again consulted many physicians, some of whom were of opinion that a foreign body was present. In August, 1888, she returned to Vienna, when she was seen for the first time by Professor Wandl. He found the uterus normal in axis, position, and mobility, but the adnexa on both sides were thickened When the finger was carried three to four centimetres (one to one and a half inches) to the right of the vaginal vault, a resistant foreign body, about two centimetres (three quarters of an inch) long and as thick as a crow's quill, was detected in the tissues at the side of the uterus. The body easily changed its place, could only be touched for an instant, and needed to be searched for often. Firm pressure against it caused much pain. The Professor thought that if the womb were drawn downward the substance would be more readily found, but this did not prove to be the case, for neither through the vagina nor rectum could it be felt at all. This difficulty accounted for the varying opinions of her preceding attendants. After several examinations, Professor Wandl felt assured of the presence of a foreign body.

On August 16th its removal was attempted. Great difficulty was experienced in fixing the substance. Finally it was located by means of two curved hooks, inserted into the roof of the vagina, and pressed together so as to include the substance, and incision being made midway between the points of the hooks. More than an hour was then spent in a vain search for the foreign body. Feeling assured that it was there, he opened Douglas' *cul-de-sac*, succeeded in finding the body and fixing it against the intact wall of the vagina. A third incision was made perpendicular to the first, through which the substance was seized with a pair of forceps and withdrawn. It proved to be a piece of a surgical sound, one and five-tenths centimetres (one-half inch) long and two millimetres (one-tenth inch nearly) thick, which had probably been rusted, and had broken off after perforating either the vagina or the neck of the uterus. Eight days after the operation the stitches were removed, and two days later the patient left for home. After the removal of the offending substance the patient improved, and the condition of the urine became better. When last heard from in November, 1888, she was feeling very comfortable.—*Wien Med. Blätter*, April 4, 1889.

A RARE CASE OF CARBONIC OXIDE POISONING.

THE following case was described by Prof. M. Litten at a meeting of the Berlin Society for Internal Medicine. During the night of December 16–17, 1888, a married couple were exposed to the action of carbonic oxide, and in the morning they were found almost lifeless. Persevering efforts, however, at length restored them to consciousness. Artificial respiration had to be kept up for a long time, especially in the case of the man. After recovery no serious consequences attacked the woman. The man suffered almost from the time of his restoration to consciousness from grave sequelæ. He was first seen by Professor Litten on December 18th, about twenty hours after restoration. The right arm, from the finger to the shoulder, together with the soft tissues from the shoulder to the spinal column, were much increased in size from a peculiar brawny infiltration. The skin of the hand and forearm was purplish, that of the arm and shoulder of an intense citron yellow. There was complete paralysis of the right arm and shoulder. The limb hung as if it belonged to a dead man. The entire arm and shoulder were also anæsthetic. No sensation was excited by the deepest prick of a needle, by ice, or by hot water. Reflex and electrical excitability were lost. Pemphygus-like vesicles existed on the backs of the hands; the contents were not purulent, and were absorbed within a few days.

In a case of carbonic oxide poisoning reported by Hasse the urine was alkaline and contained sugar. In Litten's case the composition of the urine was not altered. Out of sixteen cases treated in Frerich's clinic, in eleven (70 per cent.) there was glycosuria, in three (19 per cent.) albuminuria.

The cutaneous lesions, anæsthesia, and paralysis may occur immediately after the poisoning or come on during convalescence.

Autopsies of several cases of carbonic oxide poisoning have revealed central hæmorrhages. The cerebral arteries exhibited a remarkable dilatation and tortuosity, permitting copious

hæmorrhages, which were either eventually absorbed or underwent necrosis. Depots of softening have been found in various parts of the brain.—*Deutsch. Med. Wochenschr.*, Jan. 31, 1889.

*A CASE OF CONGENITAL MACROGLOSSY COMBINED WITH GENERAL TRUE MUSCULAR HYPERTROPHY AND IDIOCY.**

HEDWIG W., aged ten months, was brought to the clinic November 5, 1886, in order to have an operation performed upon her tongue, which protruded from the mouth as a thick, purplish swelling. The parents were healthy people, both bodily and mentally. The alveolar process of the lower jaw-bone was somewhat inclined toward the horizontal. Respiration and the power of taking nourishment were much impaired. On November 7th a vertical and also a horizontal wedge-shaped piece were excised by Professor Wolff. Hæmorrhage was easily controlled by compression. The immediate results were all that could be desired. Respiration and deglutition became easy. Six months later the mother returned with the child, saying that for a little while past the mouth had again fallen open. Although the tongue did not protrude, it could readily be seen that it was increased in thickness and breadth. Hence, trouble in breathing and swallowing had again appeared. A repetition of the operation was advised against on account of the tendency to recurrence. At this time the idiocy was fully recognized. The child's countenance was dull and expressionless. The examination of an enormous umbilical hernia revealed what had hitherto been unknown. The appearance of the child was that of an athlete. The muscles of the trunk and extremities, especially when in action, stood out as huge, strongly marked masses. In striking contrast, the skin was thin and withered. The subcutaneous fatty tissue had almost entirely disappeared. The apparently robust infant was badly nourished, and the great muscular development merely veiled the impoverishment of all the other tissues. Some muscles were particularly enlarged, as the deltoid, biceps brachii, the calf-muscles, the flexors and external rotators of the thigh, the recti abdominis, the sacro-lumbales, longissimi dorsi, and those attached to the chin. The muscles of the extremities were affected with frequent spasms. Those of the neck were fixed and contracted. The child lay with head drawn back and arms raised by the flexion of the elbows. The upper extremities were of extraordinary shortness. Mechanical contractility of the muscles was not increased. There was no abnormal muscular or nervous excitability to the faradic or galvanic current, but rather a diminution than an increase. Sensibility was apparently decreased. Hearing, taste, and smell seemed to be entirely absent. No teeth had appeared. A microscopic examination was made of the excised piece, and also of a piece purposely taken from the deltoid. Characteristic striæ were found and no sign of degeneration. The general appearance was that of normal muscular tissue. In August, 1887, the child died of pneumonia. A post-mortem examination of the brain and spinal cord showed, macroscopically, nothing abnormal except that the cerebral gyri were rather small. Neither could anything pathological be detected upon microscopic study. There was a colossal hypertrophy of the skeletal muscles and also of the muscular tissue of the intestines, whose walls were astonishingly thick. The muscular coat of the œsophagus was also somewhat thickened. The heart was very small, and there was no hypertrophy of its muscular substance. Microscopical examinations in cases of macroglossy have shown very different conditions. One variety has been described as lymphangioma cavernosum, a second as lymphangioma simplex, a third as a genuine hyperplasia of all the tissues composing the tongue, and a fourth as a true muscular hypertrophy.

But seven cases of true muscular hypertrophy have hitherto been recorded. In some of these the overgrowth of the tongue was associated with muscular hypertrophy of the extremities, in some cases the lower, and in others the upper, being involved. The present case makes the eighth, and is without analogy in that the muscular hypertrophy is universal, attacking the trunk, the extremities, and the head, and connected with an extreme atrophy of the skin. Friedreich regards true muscular hypertrophy as an independent, idiopathic disease of the muscular system, a disease *sui generis*. Auerbach considers it as an initial stage of pseudo-hypertrophy, *i.e.*, of muscular distrophy with predominant lipomatosis. The

* This unique case is published by Dr. Franz Bruck, of Berlin, from the Surgical Clinic of Prof. Julius Wolff.

former view seems confirmed by the case now under consideration, since microscopic examination of pieces taken from the enlarged muscles after death failed to reveal the presence of any degenerative process. The identity of the microscopic appearances in the tongue and the skeletal muscles, as well during life as after death, leads to the belief that an intimate connection exists between the macroglossy and the general muscular hypertrophy. H. v. Volkmann has declared that the existence of a neurotic form of macroglossy cannot be denied. Berger has described a case of inveterate trifacial neuralgia, in which notable hypertrophy of the soft tissues, especially the subcutaneous areolar tissue, took place upon the affected side. The muscular hypertrophy probably results from a primary disturbance of the nervous system, and in the same connection we may probably include the idiocy. The involvement of the entire muscular system points to a central origin. "Finally," concludes the author, "from the preceding considerations it may be admitted that, in this case, the idiocy, macroglossy and general muscular hypertrophy are derived from a common source."—*Deutsch. Med. Wochenschr.*, March 21, 1889.

PROLAPSE OF THE OVARIES.

THIS affection was the subject of a paper by Dr. E. S. McKee, of Cincinnati, read at the Kentucky State Medical Society. This disease he thought much more frequent than generally considered. He said it was a symptom often rather than a separate disease, yet it had many peculiar characteristics which entitled it to distinct consideration. The dislocation may occur: into the lateral pouch of Douglas; the true pouch of Douglas; and the anterior or vesico-uterine pouch, or the infundibulum of the inverted uterus. The last position is seldom found, and the next to the last is one of rarity.

Causes which lead to this trouble may be: increase of weight, which induces traction from below or pressure from above; causes which produce feebleness or lengthening of supports, as the conditions present during the puerperium, congestions, displacements, particularly the posterior ones; or violent straining at stool. The left ovary is more often prolapsed, because of its greater enlargement during pregnancy, and because it is more subject to disease. There are several reasons for this fact in connection with this ovary, the principal one being the valveless state of the left spermatic vein, which renders the vessel easily affected by an obstruction in the circulation.

Marked pain on walking and coition, with torturing pain on defecation, are experienced by the patient, and occasionally hysteria and melancholia. Spasms of sickening, neuralgic pain are felt in the pelvis and surrounding parts.

The displacement of the ovary usually occurs in this manner: It sinks downward and backward, and describes an arc toward the median line. The Fallopian tube and ovarian ligament form chords. The descent of the ovary brings it to that part of the pelvic fossa known as the retro-ovarian shelf, where it may remain.

Usually diagnosis is not difficult. If not found easy the patient should be examined on her left side, as the finger reaches at least half an inch farther up the posterior vaginal wall in that position. An anæsthetic may sometimes be of service. Rectal examination will allow the finger to reach an inch higher up into the pelvis than per vaginam. The elevation of the pelvic contents *en masse* must not be mistaken for mobility of the ovary.

The prognosis will depend on the condition of the ovaries, the presence or absence of complications, and the duration of the disease.

The author considered Campbell's position, on the knees and chest, of much benefit as one of the means of treatment. He thought pessaries do more harm than good. The intestines should be kept empty with some preparation of mercury. If sexual intercourse be permitted at all it should be carefully regulated. Superior advantages result from Bozeman's method of columning the vagina with the patient in the knee-chest position. He discussed Schultze's method, but considered it still under inspection. Oöphorrhaphy was an operation of much merit in the judgment of Imlach, of Liverpool, but other writers do not accord with him. Tait's operation had not been followed by the permanent good results expected. The essayist had seen prolapsed ovaries follow the ascending uterus, as it escaped from the pelvis at the fourth month of pregnancy, and after delivery they remained in the proper places. Hysterorrhaphy affords relief to some cases, and sometimes, as a *dernier resort*, extirpation becomes a necessity.

SYPHILITIC TUMORS OF MUSCLES.

HR. BRAMANN brought two cases before the Berlin Medical Society, January 23, 1889. He said that these growths generally make their appearance near the points of bony attachments of muscles, whence some have considered them of periosteal origin. But they are often found in the centre of muscular tissue, as in the first case: A woman, aged thirty-one years, six years married but never pregnant, had noticed, three months ago, a swelling upon the right side of the neck, soon followed by one near the clavicle. The older tumor was about the size of a walnut, of a firm consistence, and not situated in the neighborhood of a bone. In the second case, the infiltration was of a more diffuse character—the so-called myositis fibrosa. The patient, a man, was infected in 1874. In June of last year a tumor appeared upon the left side of the neck. It was painless but grew constantly, was of board-like hardness, and extended from the base of the skull to the scapula. Absorption under anti-syphilitic treatment was more rapid in the first than the second case.—*Deutsch. Med. Wochenschr.*, January 31, 1889.

A SULFONAL EXANTHEM.

ENGELMANN reports the case of a woman, forty years old, a sufferer from metritis and dysmenorrhœa, who had been accustomed to taking, on account of insomnia, five-tenths to one gramme (seven and a half to fifteen grains) of chloral without evil effects. Sulfonal in two gramme doses (thirty grains) failed to produce sleep, but was followed by a diffuse scarlet eruption upon the outer side of both breasts. The eruption spread symmetrically and disappeared on the third day. It was attended by intense itching. The symmetrical arrangement suggested a central disturbance of the vasomotor system.—*Deutsch. Med. Wochenschr.*, January 31, 1889.

THERAPEUTIC NOTES.

HEMICRANIA (LIEGEOIS).

℞ Sulphate of quinine, . . gr. xxv.
Salicylate of soda, . . gr. xxv.
Hydrochlor. of morphine, gr. ¼.

M. Sig.: Every half hour or every hour.—*Lyon Médical.*

FORMULARY.

Prescriptions recommended by Dr. John V. Shoemaker at the clinic for skin and venereal diseases, at the Medico-Chirurgical Hospital of Philadelphia.

INTERNAL.

Acne.

Take of Sulphide of arsenic, . 1 grain.
Extract of gentian, . 40 grains.
Mix and divide into twenty pills.
Dose: One pill three times a day.

Acne.

Take of Sirup of hydriodic acid, . 2 ounces.
Sirup of lactucarium, . 2 ounces.
Mix. Dose: One to two teaspoonfuls three times a day.

Acne.

Take of Extract of Indian hemp, . 4 grains.
Extract of nux vomica, . 4 grains.
Lupulin, . . . 30 grains.
Mix and divide into thirty pills.
Dose: Two pills morning and evening.

Acne.

Take of Papaya, ... 40 grains.
Make into fifteen powders.
Dose: One powder after meals.

Acne.

Take of Sublimed sulphur, . . 100 grains.
Aromatic powder, . . 100 grains.
Mix and make into twenty capsules.
Dose: One capsule three to four times a day.

Acne.

Take of Tincture of capsicum, . 1 drachm.
Bicarbonate of sodium, . 100 grains.
Peppermint-water, . . 5 ounces.
Mix. Dose: Two teaspoonfuls in water three times a day.

Alopecia.

Take of Tincture of chloride of iron, ... 5 drachms.
Sol. of arsenite of potassium, ... 100 drops.
Sol. of citrate of ammonium, a sufficient quantity to make . . 5 ounces.
Mix. Dose: Two teaspoonfuls in water three times a day.

Alopecia.

Take of Comp. sirup of phosphatis, 3 ounces.
Fluid extract of malt, . 3 ounces.
Glycerin, . . . 2 ounces.
Mix. Dose: A dessertspoonful two or three times a day.

Alopecia.

Take of Phosphide of zinc, . . $\frac{1}{10}$ grain.
Extract of nux vomica, . 1 grain.
Powdered capsicum, . 1 drachm.
Mix and divide into thirty pills.
Dose: From three to four pills daily.

Alopecia.

Take of Fluid extract of hops, . 4 ounces.
Fluid extract of witch-hazel, 1 ounce.
Mix. Dose: One to two teaspoonfuls in water morning and evening.

LOCAL USES OF NAPHTHOL.

Dr. Linn says the antiseptic qualities of naphthol are now being made use of very largely in hospital services in Paris. In surgery the following alcoholic solutions are used:—

℞ Naphthol beta, . 1 gramme.
Alcohol at 60°, . 1 litre (quart).—M.

This is mostly used to render aseptic the parts where operations are to be made, especially where there is hair growing.

Where the skin is denuded this formula is used:—

℞ Naphthol beta, . . 15 grammes.
Alcohol at 60°, . . 1 litre.—M.

The mouth being the great centre of microbic action, the following is advised to keep it in order:—

℞ Liquid dentifrice, Eau
Botot or any other, 100 grammes.
Naphthol beta, . . 1 gramme.
M. Sig.: Use as usual with dentifrices; put a little on brush for teeth. Rinse the mouth with a tablespoonful to a glass of warm water.

Camphorated naphthol is a capital preparation for local use to tubercular ulcerations of the mouth, tongue, etc. It is prepared as follows:—

℞ Naphthol beta pulverized, . . . 15 grammes.
Powdered camphor, . 30 grammes.
M. ft. This must be triturated until the powders are liquefied.
Sig.: Rub a little on the part affected.

Any of the above can be used in dressing wounds, either plain or mixed with water.

A much more concentrated solution is used for touching septic wounds. Naphthol is also used to inject into closed cavities, as cold abscesses, etc., or into the pleural sac. In these cases everything should be warm, the syringes, bottles, etc. The solution should be freshly prepared as follows:—

℞ Naphthol beta, . . 5 grammes.
Alcohol at 90°, . . 35 "
Hot water, . . 60 "
M. ft. Filter it while hot.
Sig.: Inject.—*Medical Times.*

THE TREATMENT OF LEUCORRHŒA.

In the Vierteljahrsch für Dermatologie und Syphilis Dr. Schwartz recommends the packing of the vagina with boracic acid in powder, followed by a tampon, in cases of leucorrhœa that have withstood the ordinary methods of treatment. The vagina is to be first cleansed and dried by sponge or cotton. A considerable quantity of boracic acid is then to be inserted on and around the os and cervix uteri, after which a suitable tampon is placed in position. The application may be renewed every three, four, or even seven days. Two or three applications will frequently suffice to remove all discharge and to cure erosions of the os uteri. As boracic acid is a "sedative salt," its employment in this manner is rather soothing than otherwise and absolutely harmless. As a detail, the Fergusson speculum is the most convenient form of instrument to use in making the application. I can, from extended experience, confirm all that Dr. Schwartz says in its favor.—*Medical Press and Circular.*

PURGATIVE PILLS.

℞ Socotrine aloes, . . . 15⅜ gr.
Resin of scammony,
Resin of jalap, . . āā 7 3/16 "
Calomel, ... 4½ "
Extract of belladonna,
Extract of hyoscyamus, āā 3⅘ "
Almond-oil soap, . . . q. s.
M. Divide into fifty pills.
Dose: Three to five pills a day.—*Répertoire de Pharmacie.*

COMPOUND LIQUORICE POWDER.

Mr. J. H. Fisher, Edinburgh, proposes an improved formula, as follows:—

℞ Senna, ... 2 parts.
Liquorice powder, . . 2 "
Fennel, ... 1 part.
Sulphur (sublimed) . . 1 "
Cream of tartar, . . . 4 parts.
Sugar, ... 2 "

He claims its more agreeable taste, ready miscibility with water, diuretic and refrigerant action, less griping, and more reliable as an aperient.—*Pharmaceutical Record.*

TREATMENT OF PRURITUS ANI AND VULVÆ.

℞ Sodii hypophosphit., . . 15.0.
Ac. carbolic., . . . 2.5.
Glycerin. pur., . . . 8.0.
Aquæ destillat., . . . 120.0.
M. Sig.: Use as a lotion.—*Dublin Journal of Medical Sciences.*

TREATMENT OF HÆMATURIA.

℞ Extracti ergotæ, . . . gr. xv.
Sacchari albi, . . . gr. xxx.
M. Div. in pulv. no. vi.
Sig.: One powder every three hours.

℞ Aluminis,
Sacchari albi, . . āā gr. xlv.
M. Div. in pulv. no. vi.
Sig.: One powder every hour.

℞ Extracti ergotæ, . . . gr. xlv.
Ol. theobrom., . . . gr. clxxx.
M. Ft. suppos. no. vi.
Sig.: Four suppositories a day.

℞ Argenti nitrat. fus., . . gr. xv.
Aquæ destill., . . . f℥xvj.
M. Sig.: To be put in equal or double quantity of water and used for injection into the bladder.

The following may also be employed in the same manner as last prescription:—

℞ Ferri sesquichloridi, . gr. xviiss *vel* xv.
Aquæ destill., . . f℥vj.
M.

—Dr. Ultzmann, in *Deutsche Med. Wochenschrift*, Feb. 28, 1889.

HEADACHES.

E. Jones (The Practitioner) in an article on "Diagnosis and Treatment of Headaches," finds that for acute low-pressure headaches this is good:—

℞ Spiritus ammoniæ aromat., . ℥ss.
Spiritus chloroformi, . . ♏x.
Aquæ, ... ad ℥j.
M.

In recurrent high-pressure headaches he finds alkalies most beneficial:—

℞ Sodii bicarbonatis, . . gr. x.
Ferri et ammonii citratis, . gr. v.
Spiritus chloroformi, . . ♏x.
Aquæ menthæ viridis, . ad ℥j.
M. Sig.: To be taken three times a day, half an hour before meals.—*Times and Register.*

CHRONIC MALARIA.

For a person who is saturated with malarial poison, Pepper gives:—

℞ Strychninæ sulphatis,
Acidi arseniosi, . . āā gr. ¾.
Extracti belladonnæ, . . gr. ij,
Quininæ sulphatis,
Pil. ferri carbonatis, . āā gr. xlviij.
M. Fiat pil. no. xxiv.
Sig.: One pill three or four times a day, after meals.—*Ibid.*

TONIC.

The following tonic is good for weak stomach and indigestion:—

℞ Quininæ hydrochloratis, . gr. xlviij.
Tr. gentianæ compositæ, . f℥iv.
Syrupi zingiberis, . . . f℥ij.
M. Sig.: Take a dessertspoonful every mealtime.—*Ibid.*

PIGMENTATION OF THE SKIN.

Where there is extensive pigmentation of the skin in cases of pregnancy, Stewart gives sodii phosphatum one drachm, in hot water, every four hours until there is a free evacuation of yellow fæces. He then substitutes:—

℞ Acidi sulph. aromat., . . ♏x.
Donovan's solution, . . ♏iij–v.
M. Sig.: Take ter die. Watch cautiously the action of the arsenic.—*Ibid.*

NEURALGIA.

For a shooting neuralgic pain in the forehead, Stubbs recommends:—

℞ Extracti belladonna, . . gr. iij.
Extracti hyoscyami, . . gr. vj.
Misce et fiat in pilulas no. xii.
Sig.: Take one pill every three hours.—*Ibid.*

CONSTIPATION.

Shoemaker recommends the use of betanaphthol, given in one-fourth to one-half grain doses, in pill form, three times a day in chronic or obstinate cases of constipation. It is antiseptic and makes the stools of a clay color. "This is a new remedy, and in my hands I have obtained the best results from it in all cases tried by me."—*Ibid.*

TONIC.

As a tonic Professor Pancoast gives:—

℞ Ext. ignatiæ amaræ, . . gr. ⅓.
Quininæ sulph., . . . gr. ½.
Ferri pyro-phos., . . . gr. j.
Piperin, ... gr. $\frac{1}{6}$.
Pulv. cinnamom., . . q. s.
M. et fiat pulv. unum.
Sig.: Given after each meal.—*Ibid.*

SPINA BIFIDA.

A case of spina bifida, in which there was incontinence of urine and general muscular debility, was presented to the class as cured by Professor Pancoast, who had made several applications of an iron at white heat over the spinal column at the lumbar and sacral regions. —*Ibid.*

OZÆNA.

In ozæna, Pancoast uses:—

℞ Acidi borici, ... ʒj.
Tr. myrrhæ, ... fʒj.
Mellis, ... fʒij.
Infus. cinchonæ, . . . fʒiij.
Aquæ, ... ad fʒiv.
M. Sig.: Use as a gargle and wash.

After using the wash, apply with the finger:—

℞ Hydrarg. chlor. mitis, . . gr. viij.
Ung. aquæ rosæ, . . . ʒj.
Misce et fiat unguentum.
Sig.: A piece the size of a pea to each nostril. —*Ibid.*

ECZEMA CAPITIS.

Professor Stewart gives absolute relief in every case of eczema capitis of young children, by giving liquor arsenici et hydrargyri iodidi, ♏ss ter die, after meals. Cleanse the head thoroughly, and apply unguentum picis liquidæ. —*Ibid.*

TYPHOID CONDITION.

Dr. Walker treated, with recoveries in almost every instance, several hundred cases of so-called threatening typhoid, in which there were persistent frontal headache, furred tongue, biliousness, tendency to constipation, and abdominal tenderness:—

℞ Calomel, ... gr. $\frac{1}{12}$.
Ipecac., ... gr. $\frac{1}{12}$.—M.

Or:—

℞ Calomel, ... gr. $\frac{1}{12}$.
Sodæ bicarb., . . . gr. ij.
Sugar of milk, . . . gr. j.
Misce et fiat pulvem.
Sig.: To be given every four hours until patient has a good passage.

Discontinue this, then give for seven days:—

℞ Quiniæ sulph., . . . gr. iss.
Caffeinæ, ... gr. ss.
Misce et fiat pulv. no. i.
Sig.: One ter die.

PULMONARY PHTHISIS.

℞ Acid. hydrocyan. dil., . . fʒj.
Acid. nitrici dil., . . . fʒiij.
Glycerini, ... fʒj.
Infus. quassiæ, . q.s. ad fʒvj.
M. Sig.: A tablespoonful in water, thrice daily, before food.—Dr. F. P. Henry.

SALOL IN BURNS.

The following ointment is recommended in the Bulletin Médical:—

℞ Lanolin, ... 100 parts.
Salol, ... 3 " —M.

MERCURIAL VAPOR IN CROUP.

Dr. Rothe, of Altenberg, relates (*Memorabilien*, 6 Heft, 1889) two cases of apparently non-membranous croup in which, when the laryngeal stenosis became so great as to oblige him to propose tracheotomy, the inhalation of the vapor of calomel produced such a remarkable change for the better that he was able to dispense altogether with the operation. He rigged up a sort of tent over the child's head and vaporized thirty grains of calomel on a metal plate over a spirit-lamp. This produced a marked improvement in the breathing in a few minutes, and shortly afterward the child fell asleep bathed in perspiration. The inhalation was ordered to be repeated every two or three hours, but with smaller doses of calomel; also whenever a severe attack of dyspnœa came on an extra inhalation was given, and never failed to produce the desired effect. Though the inhalations were continued for a couple of days there was no salivation or diarrhœa, but the vapor set up some little irritation about the eyes which made the little patients rather fractious, otherwise no unpleasant effects were produced.—*Lancet*, April 27.

FUNCTIONAL NERVOUS DISORDERS.

Dr. J. B. Johnson, prescribes the following for functional nervous disorders with constipation:—

℞ Magnesiæ sulph., . . . ʒj.
Aquæ camphoræ, ... fʒv.
Olei menth. pip., . . . gtts. ij.
Glycerini, ... fʒj.
Potassii bromidi, . . . ʒss.
Tinct. hyoscyami, . . fʒiij.
M. Sig.: Shake well. Dose: A tablespoonful every three hours.

CANNABIN IN GRAVES' DISEASE.

Valieri recommends the following formulas:—

℞ Cannabin, ... gr. ivss.
Sugar of milk, . . . q. s.
M. Make five pills.
Sig.: To be taken in twenty-four hours.

℞ Cannabin, ... gr. ivss.
Distilled water, . . . ʒiij.
Syrup of orange-flowers, . ʒj.
M. Sig.: Take in teaspoonful doses in twenty-four hours.

THIOL.

The Berlin correspondent recommends the following formulary in the Provincial Medical Journal of England, June 1st. Thiol is used for the same diseases as ichthyol:—

℞ Thiol, ... ʒj.
Vaselin, ... ʒj.
Lanolin, ... ʒj.
M. f. ungt.
Sig.: For external use.

℞ Thiol sicc., ... gr. ij.
Pulv. glycyrrhizæ, . . gr. ij.
Glycerin tragacanth, . . q. s.
M. f. pilula.
Sig.: One pill to be taken three times a day.

℞ Thiol sicc., ... ʒj.
Zinc. oxid., ... ʒij.
Amylum, ... ʒj.
Talc., ... ʒij.
M. f. pulv.
Sig.: The affected parts to be dusted with this powder.

CREOLIN.

The same writer in the above Journal also suggests the following formulary:—

No. 1.—Solutio Creolin (half per cent).

℞ Creolin, ... ♏x.
Aquæ dest., ... ʒiv.
M. Sig.: To be shaken before use. For the irrigation of wounds, impregnation of tampons, moistening of bandages, etc. Also for washing the genitals, and for syringing the uterus and vagina after delivery.

No. 2.—Solutio Creolin (two per cent).

℞ Creolin, ... ʒj.
Aquæ dest., ... ʒvj.
M. Sig.: To be well shaken before use. For the preparation of poultices and all dressings, for sloughing wounds, and for the disinfection of hands and instruments; also as a hæmostatic.

No. 3.—Injectio Creolin.

℞ Creolin, ... ♏ii–x.
Aquæ dest., . . . ad ʒiv.
M. Sig.: As an injection for gonorrhœa, leucorrhœa, and catarrh of the bladder.

No. 4.—Pulv. Creolin.

℞ Creolin, ... ♏xxv–ʒj.
Acid boracic, . . . ʒiij.
M. Sig.: Antiseptic powder. For dry bandaging; for eczema in the neck or nose.

No. 5.—Oleum Creolin.

℞ Creolin, ... ♏xv.
Olei olivæ, ... ʒij.
M. Sig.: Antiseptic oil. For inunction of the hands in gynæcological practice.

No. 6.—Pilula Creolin.

℞ Creolin, ... ♏xvij.
Extract. et pulv. glycyrrh. āā q. s.
Make 100 pills. Coat with collodion.
Sig.: Two pills to be taken night and morning.

No. 7.—Ungt. Creolin.

℞ Creolin, ... ♏xij.
Lanolin, ... ʒss.
M. f. ungt.

HÆMOSTATIC COLLODION (PARESI).

℞ Collodium, . . . 100 parts.
Phenic acid, . . . 10 "
Tannin (pure),
Benzoic acid, . . āā 5 "
M. Sig.: Apply with brush.
—*Revue de Thérapeutique; The Times and Reg.*

ALOPECIA (STEEGO).

℞ Cacao-butter, . . . 16 gram.
Olive-oil, . . . 8 "
Tannin, . . . 3 "
Quinine, . . . 0 gr. 10.
Spirit of sylvius, . . 3 "
M. Sig.: For friction.
—*Revue de Thérapeutique; ibid.*

ARTIFICIAL CARLSBAD SALT (ZIEMSSEN).

℞ Sulphate of sodium, . 40 gram.
Carbonate of sodium, . 6 "
Chlorate of sodium, . 1 "
M. Sig.: Dissolve in hot water, evaporate and reduce to powder the salt which remains. Dose: half a teaspoonful in hot water.
—*Revue de Thérapeutique; ibid.*

ANTISEPTIC DENTIFRICE (DUJARDIN-BEAUMETZ).

℞ Acid phenic, . . . 19.00
Acid boric, . . . 25.00
Thymol, . . . 0.50
Essence of mint, . . .20 drops.
Tinct. of anis, . . 10.00
Water, ... 1 litre.
M. Sig.: To be half diluted with water.
—*Bull. de Thérapeutique; ibid.*

FOR TYMPANITES AND CONSTIPATION.

℞ Naphthol,
Carbonate of magnesia,
Powdered charcoal, āā 5 gram.
Essence of mint, . . 11 drops.
M. Make fifteen powders.
Sig.: One before each meal.
—*Gazette de Gynécologie; ibid.*

THE
Medical Bulletin.

JOHN V. SHOEMAKER, A.M., M.D., Editor.
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CLINICAL STUDIES IN CARCINOMA.

EVERY generation and tribe of mankind has learned to dread those fatal scourges, phthisis and cancer, the wasting and malignant diseases. These have seemed to pursue their destructive course almost uninfluenced by treatment. Yet the unaided processes of nature teach us that the course of these maladies may sometimes be checked. Not infrequently old cicatrices of lung-tissue are observed post-mortem, giving evidence of spontaneous cure of tubercular deposits. Occasionally we meet with cases of atrophic scirrhus, in which the growth remains stationary, or even recedes. Our increased knowledge respecting the germ origin of phthisis encourages a hope that means will eventually be found of preventing its development or retarding its progress. Respecting cancer, our knowledge is more defective. The structural changes in the tissue attacked have, indeed, been carefully studied. As to the origin of cancer, however, we are still much in the dark. We perceive that long-continued irritation is sometimes followed by an atypical epithelial proliferation. The same kind of heterologous growth may also develop in the absence of irritation, or, at least, discovered source of irritation. Doubtless, could we trace minutely the life history of the tissue attacked we should discover influences capable of inducing a morbid growth. How often, for instance, does cancer of the stomach or liver follow in the train of chronic dyspepsia, gastro-duodenal catarrh, etc.?

Medicine has not yet provided us with any drug having decided power over the carcinomatous growth. Arsenic is, perhaps, the most efficient means at our disposal, and, persistently used, either alone, in combination or alternating with the bichloride of mercury, may affect the nutrition of the tumor, and hence retard its progress. The same property has been attributed to the chlorate of potassium. More recently proposed substances, such as condurango, Chian turpentine, and alveloz, have failed to approve themselves. The attention of therapeutists is constantly on the alert for some vegetable product or chemical combination which shall be effective in the treatment of this fatal malady.

In the failure of medicine we are thrown back upon surgery. The subject is one which strongly engages the mind of every operator. It came up for discussion at the Eighteenth Congress of the German Surgical Association, held at Berlin, from April 24th to 27th of the current year. Some very satisfactory results were reported, both as regards prolongation of life and freedom from recurrence. Hr. Krause, of Halle, spoke of seven cases of cancer of the rectum upon which he had operated, and in which no relapse had taken place at the end of from six to nine years. Von Bergmann exhibited four cases in which the neoplasm had been removed upward of four years ago and had not recurred. In 1884 Hr. Körte, of Berlin, extirpated a cancer which involved the soft palate, pharynx, and tonsils. Three months afterward a large mass, consisting of affected glands, was removed from the right side of the neck, and, after another interval of six months, a similar mass was taken from the left side. Since this third operation a period of four years has elapsed, during which the patient has enjoyed entire immunity. Hr. Küster exhibited a man who had suffered from an immense cancer of the face and lips. The parotid gland was also diseased. Thorough ablation had been performed four years ago, and there had been no return. Prof. v. Bergmann referred to three similar cases, in which four, five, and six years respectively had passed without a fresh outbreak. He also exhibited a patient upon whom he had operated four years ago, removing a great portion of the larynx. The diagnosis had been confirmed by a microscopical examination made by Hr. Waldeyer. Hr. Hahn added the caution that many years must pass before the patient or physician may feel assured of immunity, and instanced a case in which he had, nine years

ago, removed a large portion of the larynx, a portion of the hyoid bone and of the epiglottis on account of carcinoma. There had been no repullulation until within a few months. In this case, also, the microscope had verified the diagnosis. Three patients were brought before the Society by Krause, of Halle. In one case he had, six years ago, extirpated half the tongue on account of cancer. The two remaining cases had been operated on upward of five years ago. The result had been perfect in all. Hr. Hahn mentioned the difficulty sometimes experienced in obtaining an exact diagnosis of cancer of the tongue by means of the microscope. A tumor removed by himself had been examined by a distinguished pathologist of Berlin, who declared it to be a carcinoma. Some time afterward a Danish authority inspected the same tumor, and asserted that it exhibited not a trace of cancerous appearance. The patient was written to, and reported himself as well. Hahn, therefore, thought that there was room for error, even after microscopical examination. Hr. Küster, of Berlin, had a case, three years and more ago, in which he made a diagnosis of cancer and removed the tongue. Sections submitted to the microscope presented no similarity to cancer. The patient was placed upon large doses of iodide of potassium. Nevertheless, he soon reappeared with enlarged glands. These were taken out, and exhibited an exquisite picture of carcinoma. Finally, the man died from an extensive recurrence. Hr. Schede, of Hamburg, had removed an immense glandular carcinoma nine years ago. This, with three other cases upon which he had operated in 1884 and 1885, still remained free from disease. Hr. Petersen, of Kiel, considered that even after nine years' interval one could not feel safe. He had operated upon a woman in 1872 for cancer of the tongue, and in 1882 the disease returned in the scar. A year and a half after the second operation the patient had died of an intercurrent disease. Prof. v. Esmarch alluded to a case of tongue-cancer which had remained free for twenty years. The malady had involved almost the entire thickness of the organ, so that the greater part of it had to be removed. Prof. v. Bergmann presented two patients upon whom he had operated two and three years ago, respectively, and in whom, as yet, there were no signs of recurrence.

We have epitomized the results of the rich experience of our German colleagues, not on account of any startling novelty which they contain, but on account of the deep importance of the subject. American surgeons have learned, and from time to time promulgated, the same lessons. Whenever removal is at all possible, a cancer should be excised early. Whenever a cancer is excised, the work should be done thoroughly. These are golden rules, but how sadly often do we find them neglected! Valuable—we should rather say invaluable—time is often if not generally lost before the surgeon sees his patient. In America, women often, from sheer dread of having their secret fears confirmed, do not seek professional aid until they have exhausted the resources of domestic medicine and charlatanry. A weighty responsibility rests upon the general practitioner, by whom these cases are usually first seen. If not himself prepared to operate, let him send his patient at once to a professed surgeon, upon whose judgment, no less than executive skill, he can depend. General practitioners often take pessimistic views upon the subject of cancer, and discourage or denounce operative procedures. Yet, even granting that recurrence is the rule and cure the rare exception, it is undeniable that years may be added to life by timely resort to surgery, and the sufferer be saved the disgust of a continual, hideous, open cancer.

If cancer be at first, as is generally believed, a purely local disorder, we have all the stronger reason for advocating removal while it is in its incipiency. A cancer of the breast, for example, before the epithelial cells have infiltrated the connective tissue, may almost be looked upon, from an operative point of view, as an adenoma, from which it can hardly be distinguished microscopically. Removal at this stage consequently justifies a strong hope that it will not reappear. True, we have no sure means of determining, prior to excision, whether or not infiltration has occurred, but this is only an additional argument in favor of early interference. Again, we should remember the liability of originally benign formations taking on carcinomatous change.

PATHOLOGICAL STUDIES OF CANCER.

AT the same meeting to which we have referred in the preceding article, Hr. Heidenhain, of Berlin, gave the result of his microscopical investigations concerning the local return of cancer after amputation of the breast. If the operation be thorough the disease is not likely to return in the wound, since the overlying skin has been widely excised. But the greatest importance is to be attributed to the relations of the gland to the deeper tissues, especially the pectoral fascia. This exists as a thin layer interposed between the gland and the pectoralis major muscle. It is in direct continuity with the stroma of the mammary gland. If, then, the gland be diseased, this fascia becomes infiltrated. In taking out the gland, lobules are very apt to be overlooked and left behind in the fascia. This is the origin of relapse in twelve out of eighteen cases of amputation of the breast. Every mammary gland in which a carcinomatous nodule is developed must be looked upon as extensively, perhaps entirely, degenerated. For, even in portions apparently sound, there may be detected the signs of cancerous degeneration which Waldeyer has pointed out—luxuriant growth of the epithelium of the acini, with increase of the cells of the connective tissue surrounding the acini. This may be demonstrated from the slightest to the highest grade, so that we must conceive that the whole gland has been altered, and that the typical carcinoma is but the highest expression of this alteration. The connective tissue beneath the gland is rich in lymphatic vessels, which are capable of spreading the malignant growth with great rapidity. These lymphatics accompany the blood-vessels and lie upon their walls. Lymphatic glands, too, are sometimes found upon the surface of the pectoralis major. The epithelial cells taken up by the lymphatics are of small dimensions, but they rapidly accumulate, and form the nidus of a new growth. The pectoral muscle itself opposes a certain obstacle to the advance of the disease, since the vessels generally course parallel to its fibres without penetrating them. Some, nevertheless, enter the muscle. Heidenhain draws the practical conclusion that, when the tumor is freely movable upon the muscle, the pectoral fascia, together with a thin layer of the superficies of the muscle, should be removed; but, if the tumor be attached to the muscle, he advises that the latter be dissected out *in toto*. But little is added to the hæmorrhage, and the interference with function is not great.

Hr. Hanau contributed some interesting facts relating to the inoculability of cancer. Former attempts had secured only negative results, but it seems strange that a disease which reproduces itself so characteristically cannot be artificially engendered. The experimenters had not availed themselves of fresh surfaces or the serous cavities of the body in introducing their material. Hanau, during the past year, had a favorable opportunity of investigating the subject anew, as a rat belonging to the Institute had died of a spontaneously developed carcinoma. A large tumor was situated in the vulva, the inguinal glands were ulcerated, and those of the axilla enlarged. On the day after the animal died, he introduced small pieces, taken from uninfected glands, into the peritoneal cavity of two rats. One was killed at the end of fourteen weeks, and the whole peritoneal cavity was found diseased. Microscopic examination revealed a typical picture of carcinoma. The second rat was killed a few days later, and nodules were found upon the epididymis. Sections of these also were unmistakably cancerous. From this rat another was inoculated in the scrotum, and, when killed, malignant nodules were found in the peritoneum and posterior mediastinum.

Hr. Rinne, of Greifswald, had, nine months ago, inoculated a dog with material taken from a dog which died of cancer of the rectum. Pieces of the growth were placed in the abdominal cavity, in the subcutaneous connective tissue, and in one case development was observed in neighboring lymphatic glands. Hr. Hahn cited the negative experiments performed a few years ago by Doutrelepont. The speaker himself had transplanted some nodules from a case of incurable carcinoma in a woman to the unaffected side, and covered them with healthy skin. A tumor developed, the surrounding tissue was infiltrated, and microscopic examination demonstrated epithelial proliferation in the infiltrated region. This experiment had been

repeated with success by Hr. Bergmann. Hr. Hanau suggested, furthermore, that age might be a factor in these investigations. Carcinoma is a disease of old age. Probably our chances of success are better in operating upon old than upon young animals. Hr. Wehr, of Lemberg, has also during the past year endeavored to transplant the disease from dog to dog. He at first sought to convince himself that the swelling produced at the site of inoculation was due to cancer, and not to inflammatory action. This attempt was not immediately successful, since the growth was absorbed. Finally, however, he succeeded in producing veritable cancers of the prepuce and vagina, proved to be such by study of sections placed under the microscope. He introduced his affected pieces through a trocar into the connective tissue, pushing it in by means of a sound. He experimented upon twenty-six dogs. He obtained five tumors of the vagina and two of the penis, and altogether twenty-four lumps were produced, but they were all by degrees absorbed. But one bitch was at last inoculated with positive results. She died in about six months, and a multitude of carcinomatous growths were found in different parts of the body.

CORRESPONDENCE.

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE,
WASHINGTON, D. C., May 1, 1889.

To the Medical Profession:—

The various medical associations and the medical profession will be glad to learn that Dr. John S. Billings, Surgeon United States Army, has consented to take charge of the Report on the Mortality and Vital Statistics of the United States as returned by the Eleventh Census.

As the United States has no system of registration of vital statistics, such as is relied upon by other civilized nations for the purpose of ascertaining the actual movement of population, our census affords the only opportunity of obtaining near an approximate estimate of the birth and death rates of much the larger part of the country, which is entirely unprovided with any satisfactory system of State and municipal registration.

In view of this, the Census Office, during the month of May this year, will issue to the medical profession throughout the country "Physicians' Registers" for the purpose of obtaining more accurate returns of deaths than it is possible for the enumerators to make. It is earnestly hoped that physicians in every part of the country will co-operate with the Census Office in this important work. The record should be kept from June 1, 1889, to May 31, 1890. Nearly twenty-six thousand of these registration books were filled up and returned to the office in 1880, and nearly all of them used for statistical purposes. It is hoped that double this number will be obtained for the Eleventh Census.

Physicians not receiving Registers can obtain them by sending their names and addresses to the Census Office, and, with the Register, an official envelope which requires no stamp will be provided for their return to Washington.

If all medical and surgical practitioners throughout the country will lend their aid, the mortality and vital statistics of the Eleventh Census will be more comprehensive and complete than they have ever been. Every physician should take a personal pride in having this report as full and accurate as it is possible to make it.

It is hereby promised that all information obtained through this source shall be held strictly confidential.

ROBERT P. PORTER,
Superintendent of Census.

TREATMENT OF WRITER'S CRAMP.

Editor of the Medical Bulletin:—

DEAR DOCTOR: In some of my contributions to your excellent journal I have referred to the treatment of writer's cramp, and have spoken of the advantage of complete rest as a means of cure. In a recent article in the Medical Register I referred to the great service obtained by the employment of that wonderful piece of mechanism, the "type-writer," and as a necessary consequence of the extensive circulation of the journal referred to, I have been asked by several subscribers which machine I prefer, or which one I consider the best for practical use. Those who have read my paper referred to will not require any further reply, but as some of the inquirers were readers of the Bulletin, I desire to say that by all means the Remington type-writer is the best fitted for those who require a practical and serviceable machine. It is thoroughly adapted to the wants of physicians, whether they need it for ordinary correspondence, or for the harder work of writing for publication. I always advise my friends or patients to secure a Remington, because the small concerns are not only unreliable and too flimsy for actual work, but they are in the end the most expensive, whilst the other large machines are so apt to get out of order at a critical time as to make them a vexation to the spirit of a man, whose entire thoughts being

concentrated on his literary labor, leaves him unprepared to intelligently deal with the cursory remarks ordinarily suitable to such occasions.

By all means procure a Remington, which the experience of public writers and copyists has shown to be thoroughly reliable under all circumstances. Sincerely yours,

W. R. D. BLACKWOOD.

246 NORTH TWENTIETH STREET.

CASES WHICH TROUBLE US.

Editor of the Medical Bulletin :—

We have, so to speak, as it were, been in hot water since the *faux pas* with Miss Cordelia Aggrippinus Smith-Jones-Brown. The heroic flushing we gave her of milk of asafœtida has so disordered her lacteal apparatus as to render the efforts of her twins to absorb nutriment at the maternal fount worthless. A correct representation of the said fount would define its product as "infernal," not maternal. The scent of the Narthex hangs round it still. She threatens suit for malpraxis (also Mrs. McSquiggan is onto us about her wig), and we are "exercised," as our theological friends have it, as to the result. We feel, however, compensated in a measure by the attendance of a new patient, who ventures to test our establishment owing to its extreme cheapness. The "Great Expensary and Young Doctors Freeze Onto What You Can Get Combination" is not a trust, as some wretched scribbler in your estimable journal suggested when we smuggled our circulars into the hands of so many good families through the mail, although we did trust a few at the outset (who retrograded on us), yet we trust to make a mark in medical circles ere long, and now this new petitioner for relief may be a starter for us in our reaching out for fame (and spondulix). He has threatened baldness, from that enemy of ours, which disguised itself as a sebaceous tumor—SYPHILIS, that omnipresent attendant of so many apparently legitimate diseases. We are now, Mr. Editor, on our guard ; we recognize a circumscribing streak of roseola syphilitica on his forehead—a distinguishing and diagnostic mark not to be mistaken by such good doctors as we are. This is undoubtedly the "mark of the beast" noted in a book which too few doctors read and heed, and we have exhibited the mild chloride both by injection hypodermically and per os in the hope of striking a death-blow to this ruthless scourge of humanity. The sufferer is a bookkeeper in a large dry-goods establishment, and is naturally anxious about his capillary adornment, as he proposes to get married shortly. This, for obvious reasons, we have positively interdicted, although we have not disclosed our opinion of his malady to him as yet. No trusting maiden shall suffer innocently through her tender love if we know it—not much! We feel considerably about this matter ; it is our duty to do so, Mr. Editor ; we appreciate our important position as a go-between, if we may use the term, that harm do not come to this gentle girl. How glorious the mission of the Expensary physician, to work unknownst for the good of others, albeit the business, so far, is no good to us. Ten days have elapsed since we inaugurated treatment without perceptible benefit as yet, but if no improvement is apparent in ten days more we shall change the medicine.

P. S.—Our patient has become impertinent. He says he cannot attend properly to his work because he spits so much, and he thinks it is our medicine that does it.

P. S. (later).—The terrible disease threatens his gums through ulceration ; his teeth are all loose and his hair comes out yet more abundantly.

N. B.—A friend of Mr. Caucasus Coromandel has called to demand—yes, demand !—an explanation. The patient happened to see the entry in our case- and note- book concerning himself, and this gentleman (who looks like a lawyer) is after satisfaction or its equivalent. He says that our patient is a quiet, pious young gentleman ; that our diagnosis is an outrage and a libel. The allegation we deny and the allegator we defy ! He has called in another physician, and he wants us to refund the money for unused tickets which we shoved on Mr. Caucasus Coromandel at his last visit. We never hand cash back ; it is too hard to get. We scorn him and this insolent, intruding physician !

N. B. (still later).—The friend is a lawyer. We have got into the soup all over. The line of roseola this wretched doctor says is not specific ; it was caused by a tight cap which so many clerks foolishly wear at their desks, and the hair dropped out from the same infernal cap. Can such things be? Our late patient is awfully salivated, if they are not lying. Should we have to get him a new set of teeth and put up for a red wig for Madam McSquiggan we are gone ! The big guns on our staff say we ought to have consulted them, but after Sophronia's case we don't entertain that reverence for their genius they desire. In fact, one of them suggested the syphilitic idea to us privately. Now they want to blame us young doctors for all. TOO BAD ! TOO BAD ! too bad !

N. B. (finally).—Good-bye. BIZ.

171717 AVENUE, which is above Phil Bert.

TWO BERLIN PHYSICIANS were to settle an affair of honor with pistols and had just come upon the duelling ground, when the *fiance* of one of the combatants appeared with a revolver in her hand, threatening to shoot the first who raised his weapon. She effected a reconciliation. —*New York Sun.*

REPORTS AND ANALYSES.

DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A NEW GALACTAGOGUE.

Any drug, or combination of drugs, or any therapeutic measure, which should demonstrate its ability to stimulate the production of a plentiful supply of healthy milk, would be a great blessing to the human race. A fruitless effort to stimulate the breast-glands to activity, the compulsory resort to the bottle or the wet-nurse, is a matter of daily experience. Why have we no means of acting upon the mammary glands as jaborandi acts upon the skin, acetate of potassium upon the kidneys, or castor-oil upon the bowels? The statement of the question is a partial answer. The excretory transudations which have been named are formed by the operation of comparatively simple physical or chemical principles, such as those governing blood-pressure, osmosis, and solution. The milk, however, is a food, secreted within the organism at a special epoch and to serve a special purpose. Its composition denotes it a typical food, since it contains within itself all the alimentary principles. It is therefore a universal pabulum, specially adapted to the wants of the new-born babe, its nutrient principles being present in the most readily assimilable form. The system of the mother, having just supplied for nine months the nutritive demands of the embryo, is called upon to continue the support of the new-born child. Nature is, or would be, usually sufficient to its own needs, but the artificial habits of civilized life often render the mother unable to suckle her offspring. If a woman's vitality be reduced from any cause, it is, perhaps, irrational to expect her system to prepare a constant supply of a highly elaborated nutrient fluid.

This very general statement may serve as some explanation of the fact that, as yet, galactagogues have been of but little service. A number of substances are mentioned, in our treatises on therapeutics, which are said to increase the secretion of milk, but they have all been found unsatisfactory when brought to the test of experiment. The malt liquors have a popular reputation, but whether they actually increase the quantity of the secretion as a whole, or some of its constituents only, is debatable. The leaves of the castor-oil plant are always alluded to in this connection, but who is in the habit of using them, and do they act through any specific stimulant property, or merely by their heat determining an access of blood to the breasts? Jaborandi, or its alkaloid, is thought to act upon the breasts, but its efficacy in this direction has not yet been definitely proven.

Everything which contributes to the nourishment of the organism must favor the functional activity of the mammary glands. Unfortunately, far too often the physician has not the opportunity of superintending his patient's general condition before confinement, and systemic treatment may act too slowly to be of decided benefit to mother or child.

It is not unlikely, however, that an agent may yet be discovered which shall prove to be the *desideratum*. Jaborandi, cascara sagrada, convallaria, strophanthus, have only lately come into use, but have won approval. We may become acquainted with some drug which can at once act as a constitutional tonic and exert a specific influence upon the breasts. Such a claim is, in fact, made for a combination to which our attention has been called. It bears the title of "nutrolactis," and is prepared from the *galega officinalis*, *galega apolinea*, and *tephrosia Virginica*, indigenous plants belonging to the order *Leguminosæ*. It is said to produce within two or three days an abundant quantity of good, rich milk, and to maintain this supply during the period of lactation. The dose is a large tablespoonful immediately after meals, diluted with one or two tablespoonfuls of cold water, and a dose at bed-time, until the milk flows freely, after which two daily doses will keep up the quantity and the quality.

It is made by the Roseberry Nutrolactis Company, 18 Cortlandt Street, New York City.

MEDICAL NEWS AND MISCELLANY.

YELLOW FEVER is raging at Callao.

TWO cases of yellow fever are reported at the Quarantine in Philadelphia.

DR. CHARLES S. TURNBULL has just returned from a pleasant trip to California.

AN up-town druggist sells half a gallon of ginger on some Sundays to insatiate topers.

DR. EMILE T. SABAL, of Jacksonville, Fla., spent some days last month in Philadelphia.

DR. WALTER G. HAMMELL has removed to Philadelphia, and located at 1310 Walnut Street.

DR. S. P. MOORE, who was surgeon-general of the Confederate States, died suddenly some weeks ago in Richmond, Va., of congestion of the lungs.

THE CAMDEN COUNTY MEDICAL SOCIETY has resolved to recommend the establishment of a State Board of Medical Examiners in New Jersey.

A TRIBUTE TO DR. BILLINGS.—A number of prominent citizens of Lincoln, Nebraska, have united in a public testimonial to Dr. Frank S. Billings on his departure from that city.

A CHICAGO DIPLOMA.—Dullard—I see old man Killmer has taken to doctoring. Is he having any success? Brightly—Success? Why, he cured twenty-eight hams last winter.

AN International Congress of Otology and Laryngology will be held in Paris from September 16th to 21st. Notice of communications should be sent to the Secretary, Dr. Loewenberg, 15 Rue Auber.

FOR A EUROPEAN TRIP.—Prof. H. Earnest Goodman will sail on the North German Lloyd steamer *Aller* for Bremen on July 10. During the doctor's tour Carlsbad and other watering places will be visited.

HELP ONE ANOTHER.—*Young Doctor*—Well, I've got a case at last.'

Young Lawyer—Glad to hear it. When you get him to the point where he wants a will drawn telephone over.—*Life.*

DR. MARY MOREY, of Philadelphia, has been added to the medical staff at the State Hospital for the Insane. Dr. Morey takes the place in the pathological department made vacant by the resignation of Dr. Ida V. Reed.—*Press.*

SANITARY MEETING.—A convention was held in Pittsburgh May 31st and June 1st, under the auspices of the Pennsylvania State Board of Health, and was largely attended by physicians and sanitarians from all parts of the State.

SICKNESS AT JOHNSTOWN.—Dr. W. B. Lowman, of Johnstown, is in charge of the medical relief corps. He is assisted by many physicians. Cases are coming in increasing numbers. The most frequent ailments are said to be prostration, pneumonia, and fever.

TO BATHE the eyes properly take a large basin of cold water, bend the head close over it, and with both hands throw the water with some force on the gently closed lids. This has something of the same effect as a shower bath, and has a toning-up influence which water applied in any other way has not.—*Times.*

AN URGENT MESSAGE.—*Valet* (ringing up the Doctor at 11.30 P.M.)—Councilor M. sends his compliments and desires you to come to him at once.

Doctor (*en dishabile*)—Good gracious! What is the matter with him?

Valet—He wants a fourth hand for a rubber of whist.—*Humoristische Blaetter.*

THE brilliant Dr. William F. Waugh, Professor of Practice in the Medico-Chirurgical College, is favored by Mayor Fitler for a position on the Philadelphia Hospital staff. Equal representations of our medical schools on this staff is nothing more than fair. Philadelphia is the recognized medical centre of this continent, and to maintain it she must give equal advantages to all her schools.—*Commercial List.*

MR. BANKS —Come into this drug store, Harriet, and let's have a glass of soda water.

Mrs. B.—I will if you'll promise not to wink. I know what that means, you know.

All right, I promise.

Mrs. Banks (after leaving the drug store)—What was that spiritus frumenti you had, George?

Spiritus frumenti? That's the Latin for raspberry and cream.—*Chicago Herald.*

THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.—The annual meeting of the Medical Society of the State of Pennsylvania has been adjourned to meet in Pittsburgh September 1st. The members from almost every portion of the State were unable to reach the meeting in June on account of the floods in the western part of the State, and the adjournment of the meeting was a very judicious movement.

IT WAS FREE.—Yabsley—Hello, Wickwire, you are not looking very well to-day.

Wickwire—No; I took some lung syrup this morning, and it kind of made me sick.

Yabsley—First time I knew there was anything the matter with your lungs.

Wickwire—There isn't, I guess, but there was a free sample bottle of stuff left at the house, and I thought I would try it.—*Terre Haute Express.*

TAKING PRECAUTIONS.—Mind Reader (about to entertain the members of a New York club)—Before beginning, gentlemen, I wish to inquire if there are any surgeons present?

President—Yes, there are two.

Then I shall require that a couple of policemen be summoned.

What for?

To protect me from their scalpels should I have an epileptic fit.

BOUND TO KILL THEM SOMEHOW.—Mary—said the sick man, feebly—those yowling cats annoy me terribly. Can't they be reached by a shot gun or something of that kind?

No—replied his wife—they are on the flat roof of the adjoining house.

Mary—exclaimed the invalid again, after a pause, and his face grew hard and pitiless—throw some of these medicines up on the roof.—*Chicago Tribune.*

PHILIP GILBERT HAMERTON, the author of "The Intellectual Life," and "The Sylvan Year," will contribute the End Paper to the June Scribner, on "Past, Present and Future."

In it he says: "The difficulty after the age of forty is to keep the faculties in such a state of disciplined efficiency that they may not sink into repetition and routine. As age advances the constant tendency is to divide all time between routine and rest."

A FEW nights ago a Wilkesbarre druggist who thought he saw a medical friend coming down the street hid behind a tree and dealt him a stiff blow in the back with an umbrella as he went by. The assaulted man, being startled, jumped two feet in the air, then turning, he hit the laughing druggist a slug in the eye. Passers-by prevented further punishment, and the druggist hastened to his pharmacy. He had hit a blacksmith erroneously.—*Times.*

NATURAL UNEASINESS.—The stranger in New York City was talking earnestly and excitedly to the hotel clerk.

"I am a remarkably heavy sleeper," he said, "and often lie in bed hours and hours after everybody else is up. Promise me," he entreated, as his face grew pale with fear, "that if I should happen to sleep till noon to-morrow you will not let any of your city physicians undertake to perform an autopsy on me!"—*Chicago Tribune.*

CAMDEN MEDICAL SOCIETY.—The Camden County Medical Society met in annual session at the Buena Vista Hotel, Gloucester, May 14th. Dr. William H. Iszard presided, and read a paper on "Medical Expert Testimony." The following officers were elected: W. A. Davis, President; H. H. Davis, Vice-president; E. L. B. Godfrey, Secretary; A. M. Mecray, Treasurer. After the meeting a planked shad dinner was partaken of by the members and their friends.

RUSH MONUMENT COMMITTEE.—The Rush Monument Committee will meet in Right Gallery Room, at Music Hall, Newport, R. I., on Tuesday, June 25, at 1 P.M., or immediately after adjournment of the morning session of the American Medical Association.

The attendance of others interested in the project is invited.

Collections and subscriptions should be forwarded to the Treasurer, Dr. Joseph M. Toner, 615 Louisiana Avenue, Washington, D. C., before June 15.—ALBERT L. GIHON, M.D., Chairman, R. M. C.

RATS' TAILS.—M. Bert sewed the tip of the tail into the back of the rat. After it had taken root in its new position, he cut it off close to its original point of insertion. The rat now wore a tail reversed in position, the former tip being the root. After some time it was found that the new tail was sensitive. Conclusion: the nerves of sensation can carry impulses each way. Dr. Koch has recently performed this experiment on forty rats. In thirty cases the tails united satisfactorily, but never, even eight months later, was any sensation present in the new appendage.—*Scientific American*, May 25th.

CLINICAL EXPERIENCE.—Professor (in a New York medical college exhibiting a patient to his class)—Gentlemen, allow me to call your attention to this unfortunate man. It is impossible for you to guess what is the matter with him. Examine the shape of his head and the expression of his eyes, and you are none the wiser for it, but that is not strange. It takes years of experience and constant study to tell at a glance, as I can, that he is deaf and dumb.

Patient (looking up with a grin)—Professor, I am very sorry, but my brother, who is deaf and dumb, couldn't come to-day, so I came in his place.—*Exchange.*

CHLOROFORM IS NOT LEGALLY A POISON.—An indictment against druggist James F. Yealy for selling chloroform without a prescription and without labelling it poison was ignored by the grand jury under instructions from the district attorney. Yealy sold chloroform to Charles A. Stewart, who attempted suicide with the drug, but as poison is defined by law to be a preparation which will cause death to an adult when taken in quantities of sixty grains, or less, an indictment could not be sustained, medical authorities stating that two teaspoonfuls, or two hundred and forty grains, might be taken without causing death.—*Record.*

STUDENTS IN VIENNA.—The number of medical students, says the London Lancet, during the past winter session amounted to 3185, against 3123 the previous winter. These students belonged not only to the Austrian empire, but to many other nationalities. The most numerous class of foreigners was that of Russians, of whom there were 118. There were also 105 Americans, 78 Roumanians, 50 Servians, 46 Germans, 40 Englishmen, 18 Bulgarians, 13 Greeks, 10 Turks, 12 Swiss, 5 French, 8 Belgians, 9 Italians, 3 Swedes, 5 Dutchmen, 1 African, and 3 Australians. The total number of medical students during the session in all the Austrian Universities—excluding the Hungarian ones—was 5666. Of course, the number attending all the others put together did not equal that of the Vienna school.

TURPENTINE IN CROUP.—Dr. Lewentaner, of Constantinople, who some two years ago recommended the internal use of large doses of pure turpentine in croup, has recently published two cases treated successfully in this way which had all the appearance of being hopeless, except, perhaps, through the performance of trache-

otomy. Dr. Lewentaner gives a teaspoonful of pure turpentine at once, which produces violent attacks of coughing, during which a quantity of mucus and ultimately of croupous membrane is brought up. The dose is sometimes repeated more than once at intervals, and after the patient has begun to recover a mixture of turpentine and mucilage is given. In one of the cases a spray consisting of turpentine (4 parts), carbolic acid (4 parts), alcohol (3000 parts), and water (1000 parts) was used with the best results.—*London Lancet.*

To Remove Tattoo Marks.—The removal of tattoo marks is a matter of no little difficulty, and many different methods have been tried (blistering, suction, thermo-cautery, counter tattooing with white powder or milk, etc.) Criminals sometimes pour vitriol on their arms and hands, and, letting it act for a few seconds, plunge the limb in water. The following method is recommended by M. Variot, in the Revue Scientifique: The skin is first covered with a concentrated solution of tannin and retattooed with this in the parts to be cleared. Then an ordinary nitrate of silver crayon is rubbed over these parts, which becomes black by formation of tannate of silver in the superficial layer of the dermis. Tannin powder is sprinkled on the surface several times a day, for some days, to dry it. A dark crust forms, which loses color in three or four days, and in a fortnight or so comes away, leaving a reddish scar, free of tattoo marks, and in a few months little noticeable. It is well to do the work in patches about the size of a five-franc piece at a time. The person can then go on with his usual occupation.—*Nature.*

Bromide of Ethyl as an Anæsthetic.—Bromide of Ethyl, $C_2H_5Br.$, which was recommended as an anæsthetic in dental practice by Herr Schneider, dentist to the German Emperor, at the Munich Odontological Congress, held last year, has since that time been employed in a large number of cases by Dr. Friedreich Herz, a dental surgeon in Vienna, who contributes an interesting paper on the subject to the Internationale Klinische Rundschau of April 14th. He uses a simple inhaler, like that of Skinner, with some cotton-wool inserted to soak up the bromide of ethyl, of which he pours in about half an ounce at first, adding a little more afterward if required. In some cases less than seventy-five grains proved sufficient. Anæsthesia came on rapidly, usually in one or two minutes, and then was sufficient for from five to eight extractions. The patients took the bromide far better than chloroform or ether, neither struggling so much nor presenting any unpleasant symptoms after waking up. Some patients, who had previously suffered a good deal from ether, expressed themselves as highly delighted with the new drug. Dr. Herz has not tried the bromide on young children, but he thinks it will be found very suitable for them, in consequence of its not unpleasant taste and the simplicity of the apparatus required. How far bromide of ethyl would be applicable in important operations cannot as yet be stated. Blum, of Bamberg, however, repeated the inhalation at a single sitting, and was enabled to extract thirty-two very firmly set roots. It may be mentioned that, according to Lewin, bromide of ethyl does not induce paralysis of the heart.—*London Lancet.*

American Public Health Association,—The Seventeenth Annual Meeting of the American Public Health Association will be held at Brooklyn, N. Y., October 22, 23, 24, 25, 1889.

The Executive Committee have selected the following topics for consideration at said meeting:—

I. "The Causes and Prevention of Infant Mortality."

II. "Railway Sanitation,"—(*a*) heating and ventilating of railway passenger coaches; (*b*) water supply, water-closets, etc.; (*c*) carrying passengers infected with communicable diseases.

III. "Steamship Sanitation."

IV. "Methods of Scientific Cooking."

V. "Yellow Fever,"—(*a*) the unprotected avenues through which yellow fever is liable to be brought into the United States; (*b*) the sanitary requirements necessary to render a town or city proof against an epidemic of yellow fever; (*c*) the course to be taken by local health authorities upon the outbreak of yellow fever.

VI. "The Prevention and Restriction of Tuberculosis in Man."

VII. "Methods of Prevention of Diphtheria, with Results of Such Methods."

VIII. "How Far Should Health Authorities be Permitted to Apply Known Preventive Measures for the Control of Diphtheria?"

IX. "Compulsory Vaccination."

X. "Sanitation of Asylums, Prisons, Jails, and other Eleemosynary Institutions."

Papers upon miscellaneous sanitary subjects, not included in the above list, will be received by the Executive Committee subject to the requirements of the by-laws. Preference will be given, however, to papers upon the subjects selected by the Committee in making up the daily programme of the meeting.

All persons who propose to present papers at the next meeting of the Association will be governed by the following by-laws of the Executive Committee:—

"4. All papers presented to the Association must be either printed, type-written, or in plain handwriting, and to be in the hands of the Secretary at least twenty days prior to the annual

meeting, to insure their critical examination as to their fulfilling the requirements of the Association.

"5. If any paper is too late for critical examination, said paper may be so far passed upon by the Executive Committee as to allow its reading, but such paper shall be subject to publication or non-publication as the Executive Committee deem expedient.

"6. All papers accepted by the Association, whether read in full, by abstract, by title, or filed, shall be delivered to the Secretary as soon as thus disposed of, as the exclusive property of the Association. Any paper presented to this Association and accepted by it shall be refused publication in the transactions of the Association if it be published in whole or in part by permission or assent of its author in any manner prior to the publication of the volume of transactions, unless written consent is obtained from the Publication Committee.

"7. Day papers shall be limited to twenty minutes, and evening papers to thirty minutes, each."

Invitations extended to individuals to prepare papers for the Association do not imply their acceptance by the Committee, merit alone determining that question.

It is confidently expected that the Brooklyn meeting will be the largest and most important ever held by the Association. The local Committee of Arrangements have already organized, and have the preliminary local work well under way. No efforts will be spared to make the meeting a grand success, and every arrangement necessary to the comfort of those attending will be made in ample season. All communications relating to local matters should be addressed to J. H. Raymond, M.D., Chairman Local Committee of Arrangements, Brooklyn, N. Y.

Another circular will be issued before the meeting, giving transportation rates, hotel rates, etc.

Blank applications for membership can be obtained by addressing the Secretary.

IRVING A. WATSON, *Secretary.*

BOOK REVIEWS.

Electricity in Facial Blemishes. By PLYM. S. HAYES, A.M., M.D. 12mo, pp. 128. Chicago: W. T. Keene, 1889.

As a guide to the use of this valuable agent we do not think the book will be serviceable. The author evidently has views of his own, but they do not agree with those of dermatologists or electrotherapeutists as generally accepted.

Sixteenth Annual Report of the Board of Health of the State of Michigan. Cloth, 8vo, pp. 338.

Much valuable work is shown in this book, and State Legislatures which have as yet no Board to control State hygiene will find much to instruct them therein.

A Treatise on the Radical Cure of Hernia by the Use of the Buried Antiseptic Suture. By HENRY O. MARCY, M.D. 12mo, pp. 251. Detroit, Mich.: Geo. S. Davis, 1889.

Readers of current literature will find herein the method invented and advocated by the distinguished author in various surgical journals during the past fifteen years. Well known as an expert, his book cannot fail to please and instruct.

Immunity Through Leucomaines. By EUSEBIO GUELL BACIGALUPI. Translated from the French by R. F. RAFAEL, M.D. 12mo, pp. 170. New York: J. H. Vail & Co., 1889.

This is an extraordinary book. The author believes that he has discovered a new law (or laws) in nature, and that vaccination is the *sine qua non* as a prophylactic against everything in the way of disease. He uses the word "vaccine" in a general sense, and is enthusiastic, at any rate, and no doubt sincere.

Syllabi of Studies Pursued in the Philadelphia Dental College and Hospital of Oral Surgery. Prepared for the use of matriculates.

This small volume is arranged in a most compact and concise manner, and is of great value to students preparing to enter dental colleges. It would be well if the medical colleges would prepare a similar syllabi upon their studies, and it would be of great advantage in making better students.

Pulmonary Tuberculosis: Its Etiology, Symptomatology, and Therapeutics. By PROF. H. VON ZIEMSSEN. 12mo., pp. 120. Detroit: George S. Davis, 1888.

The author's views are reproduced in this little hand-book from his large work, with the additional knowledge obtained through the use of new drugs since the issue of the latter. The translation by Dr. Doherty, of Chicago, is well made and the style is very readable.

Extra-Uterine Pregnancy: A Discussion. 8vo, pp. 70. Philadelphia: W. J. Dornan, 1889.

This volume is a reprint of a part of the Proceedings of the American Association of Obstetricians and Gynecologists as reported in Volume I of their Transactions. The views of well-known gentlemen are given as to pathology, diagnosis, treatment, and technique of operative methods. The little book is valuable as compiling the latest opinions on a subject of vast importance, and is a good one for the general practitioner to possess.

Alcohol Inside Out, from Bottom Principles; Facts for the Millions. By ELISHA CHENERY, M.D. Philadelphia: Recards, McMullin & Co., Limited. 1889.

Dr. Chenery, who has written much and made many observations upon alcohol, has produced a volume which is of great value to the profession. The author, after giving a general outline upon alcohol, speaks of it as a poison, a food, and a medicine.

Dr. Chenery has shown upon the pages of this work a most thorough knowledge of alcohol, and the practical deductions that he has drawn will be of great utility to all readers of the book.

Warner's Therapeutic Reference-Book. Price, $1.00. Philadelphia: William R. Warner & Co. 1889.

Arranged in a very small space in this small work are included very many useful drugs. The publisher has spared no expense in producing a good sized book. It is to be regretted that the name of the author is not printed upon the title-page, inasmuch as the book is certainly wanting in very many of the more modern preparations recently introduced, which he should place in subsequent issues. The author has also unfortunately reproduced in the book many old and obsolete formulæ, which are neither of value nor useful at the present day.

Atlas of Venereal and Skin Diseases, Comprising Original Illustrations and Selections from the Plates of Various Authors. By PRINCE A. MORROW, A.M., M.D., Clinical Professor of Venereal Diseases; formerly Clinical Lecturer on Dermatology in the University of the City of New York; Surgeon to Charity Hospital, etc. List of Plates in Thirteenth Fasciculus: Elephantiasis of Leg and of Scrotum, Leucoderma, Alopecia areata, Keloid, Fibroma, Xanthelasma, Rhinoscleroma, Xeroderma pigmentosum.

The text, which is original, contains many valuable and practical opinions from one of the most active workers and writers of the day upon skin and venereal diseases.

Psychology as a Natural Science, Applied to the Solution of Occult Psychic Phenomena. By C. G. RAUE, M.D. Large 8vo. Cloth, pp. 541. Price, $3.50. Philadelphia: Porter & Coates.

This is a remarkable book. It studies and explains the intellectual spheres of the mind, of conation, and of the emotions or feelings, whilst physiological psychology and the distinctively occult phenomena which have for some years past troubled so many imaginative people are thoroughly examined. The author does not believe that materialism can alone explain the so-called occultism, and his own theory is at least ingenious if not conclusive, although the influence of Hahnemannism dominates his ideas throughout. He is a good reasoner, his style is happy; the book is not at all tiresome nor ponderous in writing as most treatises so abstruse in themselves generally are. The student of nervous diseases will find much of value herein, and the reader in search of the mysterious and "uncanny" will not be disappointed if he reads the work.

A Manual of Diseases of the Ear, for the Use of Students and Practitioners of Medicine. By ALBERT H. BUCK, M.D., Clinical Professor of the Diseases of the Ear in the College of Physicians and Surgeons, New York; Consulting Aural Surgeon, New York Eye and Ear Infirmary. 420 pages. Illustrated. Price, extra muslin, $2.50. New York: William Wood & Company.

Dr. Buck has divided his book into fifteen chapters, and has included in its pages all observations of any importance made upon the ear. The text, which is well expressed, is accompanied with much clinical experience of the author well adapted to the student and practitioner. In treating the various diseases Dr. Buck has taken occasion to give some very excellent formulæ, which will be of great value to the reader. Diseases of the middle ear, which are often very difficult for the physician to diagnose and often more troublesome to treat, are expressed in a simple yet clear manner. An appendix at the end of the book describes the anatomical and physiological sketch of the ear. The author here pays much attention to certain anatomical and physiological facts which are often omitted or overlooked in text-books upon anatomy.

A Guide to Therapeutics and Materia Medica. By ROBERT FARQUHARSON, M.P., M.D. Edin., F.R.C.P. Lond., LL.D. Aber. Fourth American from the fourth English edition. Enlarged so as to include all preparations officinal in the U. S. Pharmacopœia. By FRANK WOODBURY, A.M., M.D., Professor of Materia Medica, Therapeutics, and of Clinical Medicine in the Medico-Chirurgical College of Philadelphia, etc. Philadelphia: Lee Brothers & Co.

Farquharson's "Therapeutics and Materia Medica" has become one of the standard works of the day from the thorough consideration that the authors have given to their important subject. The volume is compact, and includes an introduction, remarks on certain classes of remedies, drugs, and preparations officinal in the United States Pharmacopœia, non-officinal preparations, with questions adapted especially to students. Dr. Woodbury, the American author, has made

a most useful appendix, which in itself includes a most admirably arranged book upon poisons, epitome of the National Formulary, weights and measures, therapeutic suggestions, an index of diseases, and a general index.

American Resorts; with Notes upon their Climate. By BUSHROD W. JAMES, A.M., M.D., Member of the American Association for the Advancement of Science, the American Public Health Association, the Pennsylvania Historical Society, the Franklin Institute, and the Academy of Natural Sciences, Philadelphia; the Society of Alaskan Natural History and Ethnology, Sitka, Alaska, etc. With a Translation from the German by MR. S. KAUFFMANN of those chapters of "Die Klimate der Erde," written by DR. A. WOEIKOF, of St. Petersburg, Russia, that relate to North and South America and the Islands and Oceans contiguous thereto. Intended for invalids and those who desire to preserve good health in a suitable climate. Philadelphia and London: F. A. Davis, 1889. Octavo, 300 pages, cloth. Price, $2.00.

Preventive medicine is, beyond all question, the most popular as well as the most beneficial at our disposal, and Dr. James has, by his keen perception, illustrated this maxim in the pages of this excellent work. It abounds in valuable and useful hints to the healthy and the sick. It points out to the one how to keep well, and to the other the places to seek health.

The author makes a very strong portion of the book, in which he shows the benefits and dangers of health resorts, as explained in Chapter II. He demonstrates the great importance of residence in a suitable place, the choice being dependent upon individual peculiarities. The advantages of American health resorts is shown by both strong and forcible reference to the good effects that have been experienced from those who have visited them. Fresh water, seaside, and mountain resorts are most carefully reviewed, and the writer considers most ably the one best adapted to this or that disease. The winter and summer resorts are likewise mentioned in detail, and the most acceptable are clearly pointed out. The chapter on therapeutics, or the effect of climate and outdoor exercise is noted, especially in pulmonary phthisis. The latter disease is one with which many are afflicted, and, consequently, the excellent advice laid down in this chapter will be of service to both physician and layman. The author, likewise, in this same chapter speaks of the great advantage of climate and outdoor exercise in asthma, hay fever, debility, rheumatism, scrofulous and malarial affections. The publisher has the work well arranged, having an admirable map of the United States included between the covers of the book.

An Elementary Treatise on Human Anatomy. By JOSEPH LEIDY, M.D., LL.D., Professor of Human and Comparative Anatomy and Zoology in the University of Pennsylvania, President of the Academy of Natural Sciences, and of the Faculty of the Wagner Free Institute of Sciences, Philadelphia. Second edition, rewritten. With four hundred and ninety-five illustrations. J. B. Lippincott Company, Philadelphia.

In the seventeen chapters of this anatomical work, Professor Leidy, who is one of the most distinguished scientists of the day, has prepared one of the ablest books of modern times. The author has, in a very original style, taken up the various parts of the human body and dissected it before his readers. The illustrations, many of which are original, are very graphic to the student who will consult them.

Dr. Leidy has devoted much labor upon this volume, and has called the attention of the student to anatomical points which will be of great value to the practicing physician. Among the many interesting subjects treated of by the author is the anatomy of the groin in relation to hernia. This interesting subject is described by Dr. Leidy in a practical manner, and in such a way as to be of great service to physicians.

The organs of special sense are all carefully and thoroughly described, and this portion of the work will be to the general practitioner, as well as to the specialist, a guide of very great importance in studying up special diseases. It is a great anatomical work by a great teacher, and one of inestimable value to the medical profession.

Diphtheria: Its Nature and Treatment. By C. E. BILLINGTON, M.D. *Intubation in Croup and Other Acute and Chronic Forms of Stenosis of the Larynx.* By JOSEPH O'DWYER, M.D. Octavo, 326 pages. Price, muslin, $2.50. New York: William Wood & Company.

Dr. Billington has written in the first part of this book the most thorough modern consideration of diphtheria, in which he begins from the definition and history of the disease and carefully outlines to the reader the symptoms, cause, diagnosis, pathology, and treatment. A very large part of the volume is devoted to the consideration of the treatment of diphtheria, in which all the methods and the many medicaments are reviewed. Dr. Billington recommends from his extensive clinical experience the salicylate of sodium as being the very best antipyretic. Quinine, he also adds, in antipyretic doses is rarely, if ever, appropriate in the early stage of diphtheria. In the great majority of cases he prescribes, the author further stated, from the

outset chlorate of potassium and the chloride of iron. We are pleased to see that Dr. Billington reports upon the great value of the chlorate of potassium, a remedy that has been decried by many writers who have not had the clinical experience in its use. In speaking of this valuable salt he says :—

"During the past twenty years I have prescribed the chlorate of potassium in thousands of cases of sore throat and scarlatina, and in many hundreds of cases of diphtheria, usually in a four per cent. solution. Many of these patients have taken it in teaspoonful doses hourly or half-hourly for several weeks continuously. In no instance have I observed," he adds, "or had any reason to think that its effect has been injurious."

We regret to see, however, that Dr. Billington in speaking of the various drugs has fallen into some of the common chemical errors of the day by calling beta-naphthol hydro-naphthol. The latter so-called preparation, as has been shown by Merch, Hoffmann, Endemann, Genois, and Shoemaker, had no chemical existence, but is a quasi-proprietary preparation. The preparation so named is only bad commercial beta-naphthol, which we hope our author will correct in a subsequent issue of this admirable book.

Dr. Joseph O'Dwyer, of New York, has a most excellent article in the concluding portion of the work on "Intubation in Croup, and Other Affections of the Larynx." Dr. O'Dwyer's text is good, the illustrations striking, and the method of operating very clear.

Cyclopædia of the Diseases of Children, Medical and Surgical. By American, British, and Canadian Authors. Edited by JOHN M. KEATING, M.D. Illustrated. Complete in four handsome imperial octavo volumes of about 800 pages each. Price per volume: Cloth, $5; full sheep, $6; half Russia, $6.50. Philadelphia: J. B. Lippincott Company, publishers, 715 and 717 Market Street.

Volume I of this great work contains an "Introductory," by A. Jacobi, M.D., followed by Part I, in which the following general subjects are considered: "Anatomy," by George McClellan, M.D.; "Physiology," by Angel Money, M.D., M.R.C.P.; "Diagnosis," by James Finlayson, M.D.; "Therapeutics," by Roberts Bartholow, M.D., LL.D.; "The Influence of Race and Nationality Upon Disease," by J. Wellington Byers, M.D.; "Bacteriology," by E. O. Shakespeare, M.D., Ph.D.; "Maternal Impressions," by William C. Dabney, M.D.; "Embryology," by Horace Jayne, M.D.; "Diseases of the Fœtus," by B. C. Hirst, M.D.; "The Care of the Child At and Immediately After Birth, in Health and Disease," by R. A. F. Penrose, M.D., LL.D.; "Closure of the Ductus Arteriosus and of the Umbilical and Hypogastric Arteries," by J. Collins Warren, M.D.; "Injuries of the Newborn," by Theophilus Parvin, M.D., LL.D.; "Malformations and Congenital Tumors," by W. W. Jaggard, A.M., M.D.; "Infant-Feeding—Weaning," by T. M. Rotch, M.D.; "Wet-Nurses," by William H. Parish, M.D.; "Diet After Weaning," by Samuel S. Adams, A.M., M.D.; "Nursing of Sick Children," by Miss Catherine Wood; "Hygiene of the Nursery," by L. M. Yale, M.D.; "Dentition," by John Dorning, M.D.; "Puberty," by Thomas More Madden, M.D., F.R.C.S.

In Part II fevers and miasmatic diseases are treated as follows: "Fever—General Considerations," by William Pasteur, M.D., F.R.C.S.; "Enteric or Typhoid," by James C. Wilson, A.M., M.D.; "Typhus," by Alexander Collie, M.D., M.R.C.P.; "Relapsing," by Roland G. Curtin, M.D.; "Epidemic Cerebro-Spinal Fever," by J. Lewis Smith, M.D.; "Scarlet Fever," by Samuel C. Busey, M.D., LL.D.; "Diphtheria," by J. Lewis Smith, M.D.; "Morbilli," by F. E. Waxham, M.D.; "Rötheln," by William A. Edwards, M.D.; "Pertussis," by T. M. Dolan, M.D., F.R.C.S.; "Variola, Varioloid," by A. D. Blackader, M.D.; "Vaccinia," by W. T. Plant, M.D.; "Varicella," by C. G. Jennings, M.D.; "Parotitis," by O. P. Rex, M.D.; "Erysipelas," by Joseph O. Hirschfelder, M.D.; "Rheumatism," by W. B. Cheadle, M.D., F.R.C.P.; "Malaria," by F. Forcheimer, M.D.; "Yellow Fever," by John Guitéras, M.D.; "Dengue," by Rudolph Matas, M.D.; "Cholera," by E. O. Shakespeare, M.D.

The contributions thus enumerated are from some of the best and most eminent writers on both continents. They embrace all the recent investigation upon the special subjects considered and contain a field of knowledge. Among the many valuable articles included in Part I may be mentioned that on "The Care of the Child At and Immediately After Birth, in Health and Disease," by the eminent Professor Penrose. In a most practical manner our author relates how the infant shall be managed from one who has had a large bedside experience of many years in Philadelphia. In Part II we wish to especially commend the contribution upon "Pertussis," or whooping cough, by T. M. Dolan, M.D., F.R.C.P., of Halifax, England. The article is written in a clear and forcible style, and contains very many valuable historical and etiological points.

Dr. Dolan is already known as a writer and an authority upon pertussis, having produced a work upon this subject which is one of the best of modern times. A very valuable table accompanies the text, showing the annual death-rate per million in England and Wales from 1838 to 1880. The death-rate per thousand from all causes, including whooping cough, in London from 1800 to 1881 also follows in tabular form.

The strongest portion of Dr. Dolan's account of this disease is included under the treatment, which the author states must be directed to meeting symptoms, and by efficient surveillance to prevent complications.

The illustrations to Volume I are very large, and Dr. Keating is to be congratulated on the excellent manner with which he has edited this volume.

Annual of the Universal Medical Sciences, a Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by CHARLES E. SAJOUS, M.D., Lecturer on Laryngology and Rhinology in the Jefferson Medical College, Philadelphia, etc., and seventy associate editors, assisted by over two hundred corresponding editors, collaborators, and correspondents. Illustrated with chromo-lithographs, engravings, and maps. Five volumes. 1889. F. A. Davis, publisher, Philadelphia, New York, and London.

"Diseases of the Lungs," which forms the opening subject in Volume I, is most ably reviewed by Prof. James Whittaker, of Cincinnati. Tuberculosis, especially in reference to its etiology, includes a large number of recent investigations. The communication by flies of the contagion of tuberculosis is alluded to, and Dr. Whittaker writes that the question of the vitality of the bacilli transmitted by flies must, therefore, be answered in the affirmative. Prof. Alfred L. Loomis and Dr. Charles E. Quimby, of New York, follow with a most complete account of "Diseases of the Heart" A very excellent contribution is next to be found on the succeeding pages by the late Dr. Edward T. Bruen, on "Diseases of the Stomach, Liver, and Pancreas." The following subjects are also in Volume I: "Diseases of the Intestines and Peritoneum; Cholera," by Dr. W. W. Johnston; "Gastro-Intestinal Diseases in Children," by Dr. L. E. Holt; "Animal Parasites and Their Effects," by Prof. Joseph Leidy and Dr. Charles S. Dolley; "Diseases of the Kidneys, Bladder, and Suprarenal Capsules," by Dr. James Tyson and Dr. Allen J. Smith; "Fevers," by Dr. J. C. Wilson, assisted by Dr. S. Solis Cohen and Dr. C. Meigs Wilson; "Scarlet Fever, Measles, and Rötheln," by Dr. Louis Starr; "Diphtheria, Pertussis, and Parotitis," by Dr. J. Lewis Smith, assisted by Dr. Frederick M. Warner; "Rheumatism and Gout," by Prof. N. S. Davis; and "Diabetes Mellitus," by Dr. James Tyson. The rich array of medical writers upon this volume surpasses any similar publication lately issued. The succeeding volumes, as will be seen by the reader, possesses equal value in containing all the recent progress in medical science from every portion of the civilized globe.

Volume II includes contributions from Prof. E. C. Seguin, Prof. Harry Hun, Dr. Edward N. Brush, Dr. W. R. Birdsall, Prof. Paul F. Mundé and Dr. B. H. Wells, Prof. William Goodell and Dr. W. Constantine Goodell, Prof. Wm. H. Parish, Prof. Theophilus Parvin, Prof. W. L. Richardson, Dr. Andrew Currier, Prof. Louis Starr and Dr. W. M. Powell, and Dr. Charles Minot.

Volumes III, IV, and V contain the well-known names of Senn, Keyes, Kelsey, Conner, Stimson, D. Hayes Agnew, Longstreth, Martin, Hunt, Garretson, assisted by Cryer, J. William White, Christopher Johnston, Packard, Van Harlingen, Oliver, Gould, Turnbull, Sajous, Delavan, Ingals, Cohen, Draper, Keating, Tyson, Griffith, Hare, Holland, Ranney, Rohé, Gihon, Hamilton, Ernst, Sudduth, Manton, and Forbes. Many of the foremost writers, teachers, clinicians, and practitioners of both continents are thus included, either as editors, collaborators, or associate editors, in the three remaining volumes of this stupendous work.

The five volumes, that can only be referred to in this brief manner, encompasses the entire domain of medicine. All the specialties are particularly reviewed by some of the foremost workers and authorities in their several departments. The most of original matter that has in this manner been collected together furnishes to the physician an encyclopedia of medical science brought down to the present day. It gives to both the physician and surgeon the most thorough, complete, and easy reference-book of modern times. Five volumes having each subject arranged in such a systematic manner places at the disposal of all medical men a fund of information that every one should possess.

Dr. Sajous has exhibited most careful and judicious editorial work in bringing the ANNUAL to its present state of perfection. The editor has been most ably assisted by a brilliant corps of associate and corresponding editors, with collaborators and correspondents from every part of the globe. One of the most complete yet concise indexes by Dr. C. Sumner Witherstine follows at the end of each volume. In addition Dr. Witherstine has appended to volume V a general index, divided on each page into three columns in the following order: First, General Index; second, Therapeusis; and third, Authors Quoted. As a reference the index alone becomes indispensable to every physician who proposes to keep up to the times. Mr. F. A. Davis, the publisher, in the ANNUAL for 1889, has simply surpassed any work of modern times. He has made the ANNUAL—the only work of the kind in existence—and has produced a magnificent specimen of fine book-making, containing clear, bright, and handsome type, well-executed chromo-lithographic plates, engravings, and maps that are a credit, and also give to the house a great reputation as good publishers.

COMMERCIAL NEWS.

April Number.

We will advance your subscription three months for each April (1889) number of The Medical Bulletin you send us.

An Important Point.

Every physician who does a prescription business must, at times at least, feel how perfectly he is at the mercy of the druggist. That the quality of medicines used in the prescription is as important a factor in the cure of a disease as a correct diagnosis needs no argument, and a physician violates no code, either of ethics or morals, in demanding of his druggist that which he knows to be reliable, instead of leaving to the latter to decide whose preparations he will or will not use. In this connection we desire to call particular attention to the preparations of the Wm. S. Merrell Chemical Co., of Cincinnati. The alkaloids, resinoids, resins, and salts prepared by this house are of superior quality. Their green-root tinctures are of peculiar excellence, and we are never without their tincture (green root) of gelsemium. Their fluid hydrastis also merits particular attention. The latter is coming into more general use by the profession every day. We have long ago considered it one of our most valuable indigenous remedies.—*Massachusetts Medical Journal.*

Index to Advertisements.

For the convenience of our numerous readers, we will hereafter insert a classified index of advertisements appearing in The Medical Bulletin. It will be found on advertising page 29 of the current issue.

Cholera Infantum.

It frequently happens that a baby, sick with diarrhœa or cholera infantum, or much reduced by digestive disturbance, cannot retain milk on its stomach, it seeming to act as an irritant, and no hope of relief can be entertained until it is excluded from the diet.

In such cases Mellin's Food should be used with water alone, or with barley water. It may, and frequently should, be given cold, and if the vomiting be severe a teaspoonful only should be given at one time, repeating at intervals of ten minutes.

When the vomiting has been arrested the child can be allowed to feed from the bottle. After a couple of days have elapsed without any vomiting, milk in small amounts, gradually increased as the child can bear it, may be added to the diet, but with caution at first.

Soluble Food for Infants.

In recognition of the courtesy shown us by Messrs. Reed & Carnrick to visit their laboratory at Goshen, and personally observe the several successive steps in the process of preparing their Soluble Food, we desire to express our thanks. We were very forcibly impressed with the precaution exercised in obtaining practically sterilized and partly digested milk, and the absolute cleanliness observed throughout the entire process. We unhesitatingly indorse their Soluble Food, and shall continue prescribing it for our babies: Edward Molitor, M.D., Somonauk, Ill.; J. Gill. Allan, M.D., Shelbyville, Ky.; J. D. Herrmann, M.D,, Eastman, Ga.; S. T. Turner, M.D., El Paso, Tex.; J. I. McConnell, M.D., Chatanooga, Tenn.; J. C. B. Justice, M.D., Ashville, N.C.; B. Z. Henslee, M.D., Dickson, Tenn.; W. G. Ferguson, M.D., Hughesville, Mo.; J. H. McDuffee, M.D., Keyser, N. C.; W. H. Hudson, M.D., La Fayette, Ala. — *New York Polyclinic School.*

Threatened Abortion.

M. D. Makuna, M.R.C.S., England, Lic. Med. University, Bombay, 1876, Trebeebut, Rhondda Valley, South Wales, says: "I have much pleasure in expressing my satisfaction with the results I have obtained by the use of Aletris Cordial. One of my patients, who had miscarried three times previously, took Aletris Cordial during the last three months of pregnancy, and was delivered of a fine, healthy boy. I ordered it at her own solicitation, as she expressed so much ease and comfort after the use of the first bottle. I am now giving it to two more patients who have miscarried several times before, and I am in hopes of good results. I consider it a valuable addition to the pharmacopœia, on account of its anti-spasmodic and nerve-tonic properties, and I should not like to go without it."

For Index to Advertisements, see advertising page 29.